

# Guía rápida de líquenes de las Islas Galápagos



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— VERSION 3 —

2013

Fundación Charles Darwin

*Puerto Ayora, Santa Cruz, Galápagos*



— BORRADOR —

Realizado con soporte del Parque Nacional Galapagos, National Geographic Society, Erwin Warth Stiftung, Basler Stiftung, The Bay and Paul Foundations, National Science Foundation



# Contenido

Introducción.....	1
Ubicación geográfica de las islas Galápagos .....	1
Zonas de vegetación en Galápagos.....	
Zona costera .....	1
Zona seca.....	1
Zona de transición .....	3
Zona húmeda.....	4
Zona árida alta .....	4
La Simbiosis Liguénica.....	6
¿Qué son los líquenes?.....	6
Ecología de los líquenes.....	7
Micobionte.....	7
Fotobionte.....	7
El talo .....	9
Talo crustáceo.....	9
Talo foliáceo .....	10
Talo fruticuloso .....	10
Plecténquimas.....	10
Órganos apendiculares .....	11
Cifelas, pseudocifelas, máculas y cefalodios.....	11
Estructuras reproductoras.....	12
Soredios y isidios .....	12
Los picnidios.....	13
Apotecios y peritecios.....	14
El asco .....	15
Las ascósporas .....	16
Bioquímica de los Líquenes.....	18
Tests microquímicos .....	19
Placas fotográficas.....	21
Glosario.....	60
Literatura.....	67
Lista de especies .....	68

## Introducción

Esta guía rápida permite conocer los líquenes de las Islas Galápagos por 453 fotografías macro, es decir 438 de las 570 especies reportadas del archipiélago.

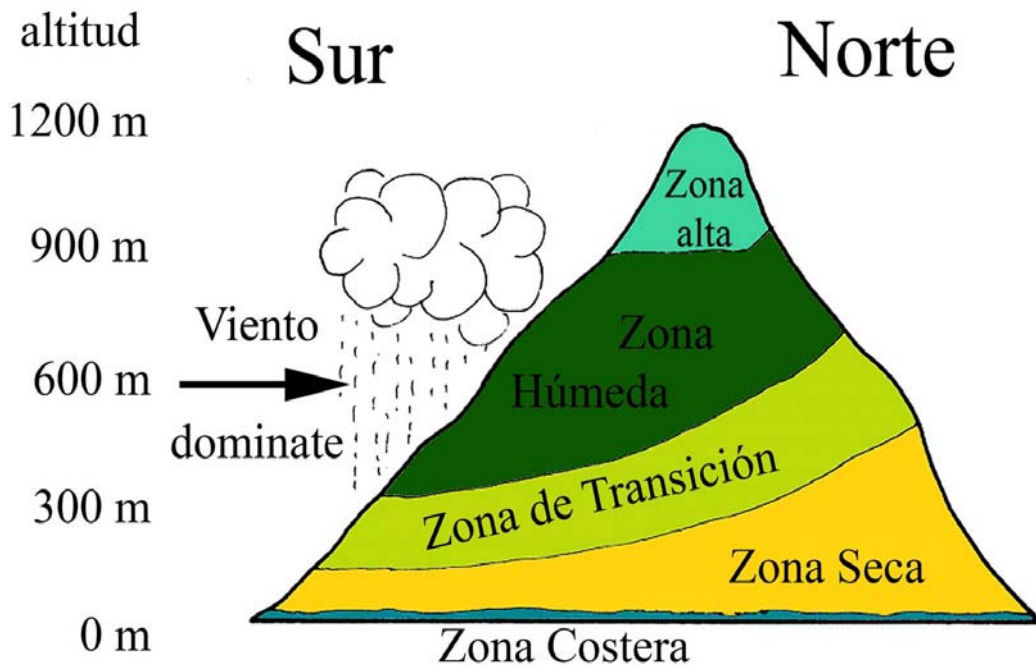
### *Ubicación geográfica de las islas Galápagos*

El archipiélago de Galápagos se ubica en el Océano Pacífico a la altura de la línea ecuatorial que pasa por la montaña más alta de las islas, el volcán Wolf, situado al norte de la isla Isabela a unos 1 000 km al oeste de las costas del Ecuador continental. La superficie total del archipiélago es de 7 995,4 km<sup>2</sup> y posee una línea de costa de 1 688 km. Hay 13 islas grandes, con una superficie mayor de 10 km<sup>2</sup>; cinco de las islas (Isabela, Santa Cruz, Fernandina, Santiago, y San Cristóbal) representan el 93,2% de la superficie total del archipiélago (Jackson 1997).

La isla Santa Cruz: Es la segunda isla más grande del archipiélago, con una superficie de 986 km<sup>2</sup> y una altitud de 864 m s.n.m. Esta consiste en un cono volcánico principal, con pequeñas inclinaciones topográficas en las elevaciones más bajas, volviéndose más abrupto en las elevaciones más altas (Jackson 1985). Santa Cruz es una de las más antiguas islas del Archipiélago, su origen es complejo ya que en las partes bajas se puede encontrar terrenos que corresponden a una plataforma submarina levantada.

Esta isla es la más estudiada del archipiélago en cuanto a vegetación. Por su altura y exposición directa a los vientos del sur y sureste, la isla Santa Cruz tiene casi la totalidad de las zonas climáticas definidas para las islas Galápagos, pero no tiene la zona árida alta que ocurre solo en los volcanes más altos del Archipiélago (Fig. 1). A pesar de la presencia de una extensa zona agrícola, existen todavía áreas significativas de cada tipo de formación vegetal natural.

## Zonas de vegetación en Galápagos



**Figura 1.** Secuencia esquemática de las zonas de vegetación en las islas Galápagos (Jackson 1993) y modificado por F. Bungartz.

**Zona costera:** Se trata de la franja costera de las islas e incluye las playas, los manglares y las lagunas salobres. Las plantas predominantes son los mangles, y en las partes más áridas, arbustos y pastos que toleran la sal. Las cuatro especies de mangle que se encuentran comúnmente en las caletas y lagunas protegidas son el mangle rojo (*Rhizophora mangle*), el mangle negro (*Avicennia germinans*), el mangle blanco (*Laguncularia racemosa*) y el mangle botón (*Conocarpus erecta*). Algunos de los islotes más pequeños están completamente cubiertos por vegetación de la zona costera (Jackson 1993, McMullen 1999). Especies de líquenes típicos para esta zona son: *Arthothelium galapagoense*, *Angiactis spinicola*, *Buellia galapagona*, *Buellia straminea*, *Dirina paradoxa*, *Opegrapha arabica*, *Peterjamsia circumscripta*, *Roccella gracilis*, *R. galapagoensis*, *R. albida*, *R. nigerrima*, *Ramalina fragilis*, *R. polyforma* etc.

**Zona seca:** Adentrándose de la costa al interior está zona de vegetación más grande del archipiélago: un bosque semi-desértico dominado por sus árboles deciduos y por arbustos como el *Bursera*, y especies perennifolias y tolerantes a la sequía como el *Croton scouleri*, y los cactus *Opuntia* y *Jasminocereus*. Las plantas deciduas pierden las

hojas durante la estación seca. Las plantas que viven en esta zona, o tienen adaptaciones para resistir la sequía, como por ejemplo hojas pequeñas, raíces profundas, y un hábitus deciduo; o son hierbas anuales que pueden sobrevivir durante la estación seca como semillas. Debido a la competencia por el agua, las plantas de esta zona se exhiben a menudo en intervalos casi regulares. Esto se aprecia mejor en una ladera cubierta de palo santo o en una pendiente solo con *Tiquilia* creciendo en ella (Jackson 1993, McMullen 1999). Especies de líquenes típicos para esta zona son: *Acarospora chrysops*, *Arthonia cinnabarina*, *Ramalina darwiniana*, *R. furcellangulida*, *R. sideriza*, *R. complanata*, *Bathelium degenerans*, *Caloplaca epiphora*, *Collema furfuraceum*, *Dirinaria picta*, *Helminthocarpon leprevostii*, *Lecanographa laingiana*, *Lecanographa subcaesioides*, *Leucodecton occultum*, *Opegrapha loandensis*, *Parmotrema dominicanum*, *Parmotrema tinctorum*, *Phaeographis punctiformis*, *Pyrenula cruenta*, *Pyxine cocöes*, *Sclerophyton murex*, *S. vertex*.

La zona árida es la zona de vegetación más extensa y tiene el mayor número de especies endémicas. Los líquenes abundan en esta zona, ya que son tolerantes a las condiciones secas y también son capaces de absorber la humedad de la garúa ocasional.

**Zona de transición:** Tiene un carácter intermedio entre la zona de *Scalesia* y la árida, el bosque es dominado por la pega pega, *Pisonia floribunda*, el guayabillo, *Psidium galapageium*, y el matazarno, *Piscidia carthagenensis*. Es más densa y diversa que el bosque de la zona árida y en general es difícil decir cuál es la especie dominante. Hay muchos arbustos entrelazados y hierbas perennes (Jackson 1993, McMullen 1999). En la zona de transición las barbas largas de líquenes pálidos son muy típicas. Líquenes típicos para esta zona son: *Bulbothrix laevigatula*, *Canoparmelia caroliniana*, *C. raunkiaeri*, *Hypotrachyna osseoalba*, *Lecanora caesiorubella*, *Ochrolechia africana*, *Ramalina anceps*, *R. solediantha*, *R. solediosa*, *R. usnea*, *Lobaria patinifera*, *Tephromela atra*, *Teloschistes flavicans*, *T. chrysophthalmus*, *Usnea baileyi*, *U. rubicuna*, *U. mexicana*.

### Zona Húmeda

En la isla Santa Cruz se la puede dividir en cuatro partes:

- a) **Bosque de *Scalesia*:** Es un límite superior la zona de transición que se fusiona con el bosque perennifolio de *Scalesia* que es un lujuriante bosque de neblina donde, en la

Isla Santa Cruz, domina el árbol *Scalesia pedunculata*. El tronco y las ramas de los árboles de esta zona están cubiertos de plantas epífitas, mayormente musgos y hepáticas, pero también de helechos, orquídeas, piperáceas del género *Peperomia* y la bromeliácea *Racinaea insularis*. En esta zona se encuentra menos arbustos y plantas herbáceas, pero abundan los helechos y los licopodios.

Este tipo de bosque se encuentra solo en las islas con más altura y como la zona es rica en productividad y fertilidad del suelo, ha sido cortada extensamente para la agricultura y la ganadería. En Santa Cruz, San Cristóbal y al sur de Isabela, solo quedan fragmentos de esta zona que fue una vez extensa. En la isla Santiago las cabras han destruido la mayor parte de la vegetación en el pasado, pero ahora las cabras fueron erradicadas y esta en completa recuperación la zona vegetativa húmeda. El bosque de *Scalesia* es diverso y está asociado también con muchas especies endémicas. Durante la estación seca de las tierras bajas, está continuamente empapado con la humedad de la garúa (Jackson 1993, McMullen 1999).

**b) Bosque de *Zanthoxylum* o “zona” Café:** Esta zona prácticamente ha desaparecido de Santa Cruz, debido a la colonización humana. Sin embargo, lo poco que queda refleja un estado intermedio entre el bosque denso de *Scalesia* y la vegetación tipo arbusto de la zona de Miconia. Se manifiesta en un bosque abierto dominado por la uña de gato (*Zanthoxylum fagara*), *Tournefortia pubescens* y *Acnistus ellipticus*. Los árboles tienen una pesada cubierta de plantas epífitas, particularmente líquenes, musgos, hepáticas y helechos, los que dan a esta zona una apariencia parda durante la estación seca.

**c) Arbustos de *Miconia*:** En las partes altas de Santa Cruz hay un cordón de densos arbustos de *Miconia robinsoniana*. En esta zona no hay árboles nativos y los helechos son abundantes (Jackson 1993, McMullen 1999).

**d) Pampa:** Más arriba de la zona de la *Miconia* no hay prácticamente árboles ni arbustos y la vegetación consiste principalmente en helechos, hierbas la planta más alta es el helecho arbóreo *Cyathea weatherbyana*, esta es la zona más húmeda especialmente durante la época de garúa (Jackson 1993, McMullen 1999). Los cambios en esta zona son debido a la agricultura e invasión de especies invasoras como por ejemplo: *Cinchona pubescens*.

Especies de líquenes típicos para esta zona son:

*Acantholichen pannarioides*, *Brigantiaea leucoxantha*, *Calopadia pruinosa*, *Calopadia subcoerulescens*, *Cladia aggregata*, *Cladonia ceratophylla*, *Cladonia confusa*, *Cladonia subsquamosa*, *Coenogonium strigosum*, *Dictyonema glabratum*, *Dictyonema sericeum*, *Diorygma poitaei*, *Diploschistes cineraeocaesius*, *Erioderma soledatum*, *Everniastrum vexans*, *Graphis acharii*, *Heterodermia circinalis*, *H. galactophylla*, *H. podocarpa*, *Hypotrachyna isidiocera*, *H. laevigata*, *H. microblasta*, *Leptogium cyanescens*, *L. javanicum*, *L. marginellum*, *L. punctulatum*, *Phyllopsora furfuraceum*, *Physcia atrostriata*, *Pseudocyphellaria aurata*, *P. crocata*, *Sticta dichotoma*, *Sticta weigeli*, *Synnesia leprobola*, *Telothrema pachysporum*.

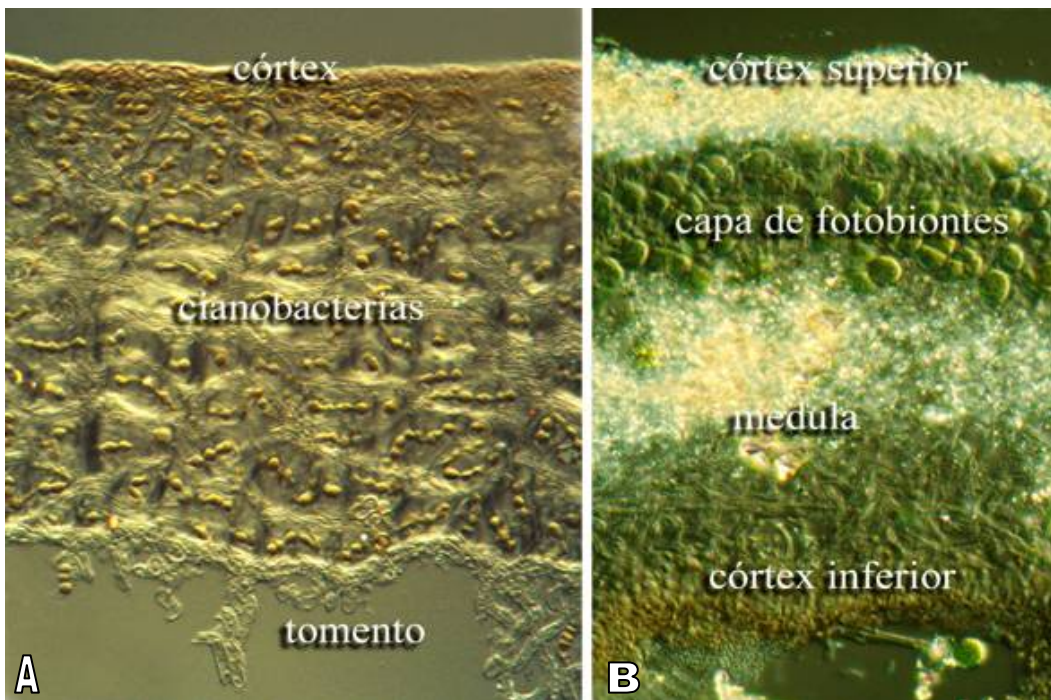
**Zona árida de alta:** Solamente está presente en la isla Fernandina y los volcanes de la isla Isabela (Darwin, Ecuador y Cerro Azul). Esta zona es muy poco conocida y más estudios son necesarios para clasificarlo.

## La Simbiosis Liquénica

### ¿Qué son los líquenes?

Los líquenes son una asociación de un hongo heterótrofo (*micobionte*) con un alga fotosintética (*fotobionte*). Están tan íntimamente relacionados entre sí que se comportan y reproducen como un organismo único independiente. El hongo se encarga de proteger al alga de las radiaciones directas del sol y brindarle agua y sales minerales. El alga a su vez realiza fotosíntesis y proporciona a los hongos nutrientes (en forma de azúcar o alcohol) (Rodríguez & Ortega 2003).

Las algas que componen los líquenes son de dos tipos: cianófitas o algas azules (bacterias fotosintéticas), y clorófitos o algas verdes (Fig. 2). El hongo es generalmente un ascomiceto, con excepción de muy pocas líquenes donde el hongo simbionte es un basidiomiceto (Nash III 2008a).



**Figura 2.** Secciones transversales de los fotobiontes. (A) Cianobacterias y (B) algas verdes (Bungartz *et al.* 2002).



## *Ecología de los líquenes*

Los líquenes pueden crecer exitosamente en sustratos que son demasiados áridos para soportar algas libres. Por eso los líquenes logran poblar muchas áreas que son inhóspitas para plantas vasculares (Brodo et al. 2001, Nash III 2008a). El éxito de los líquenes es proporcional al grado en que pueden evitar competencia con plantas (Rodríguez & Ortega 2003). Muchos líquenes crecen muy lentamente sin proveer humus, gracias al cual plantas podrían invadir sus áreas. Sin embargo, no pueden sobrevivir extremos de calor y sequedad continuos (Brodo et al. 2001, Nash III 2008a). En las islas Galápagos esto es evidente porque las rocas horizontales expuestas a constante calor o sol no sostienen muchos líquenes. En cambio las rocas verticales en la sombra contienen abundantes líquenes debido que los lados de las rocas verticales reciben más humedad en forma de condensación.

## *Micobionte*

Los hongos que se entran en la asociación de un líquen son principalmente los *Ascomycota* y sólo unos pocos pertenecen a los *Basidiomycota*. Se han observado también algunas formas más o menos inciertas de liquenización en otros grupos fungales. De los 35 órdenes que conforman los *Ascomycota*, 18 de ellos incluyen taxa que liquenizan, mientras que otros órdenes están conformados sólo por especies liquenizadas (*Ostropales*, *Gyalectales*, *Peltigerales*, *Pertusariales*, *Opegraphales*, *Pyrenulares* o *Teloschistales*) (Nash III 2008b).

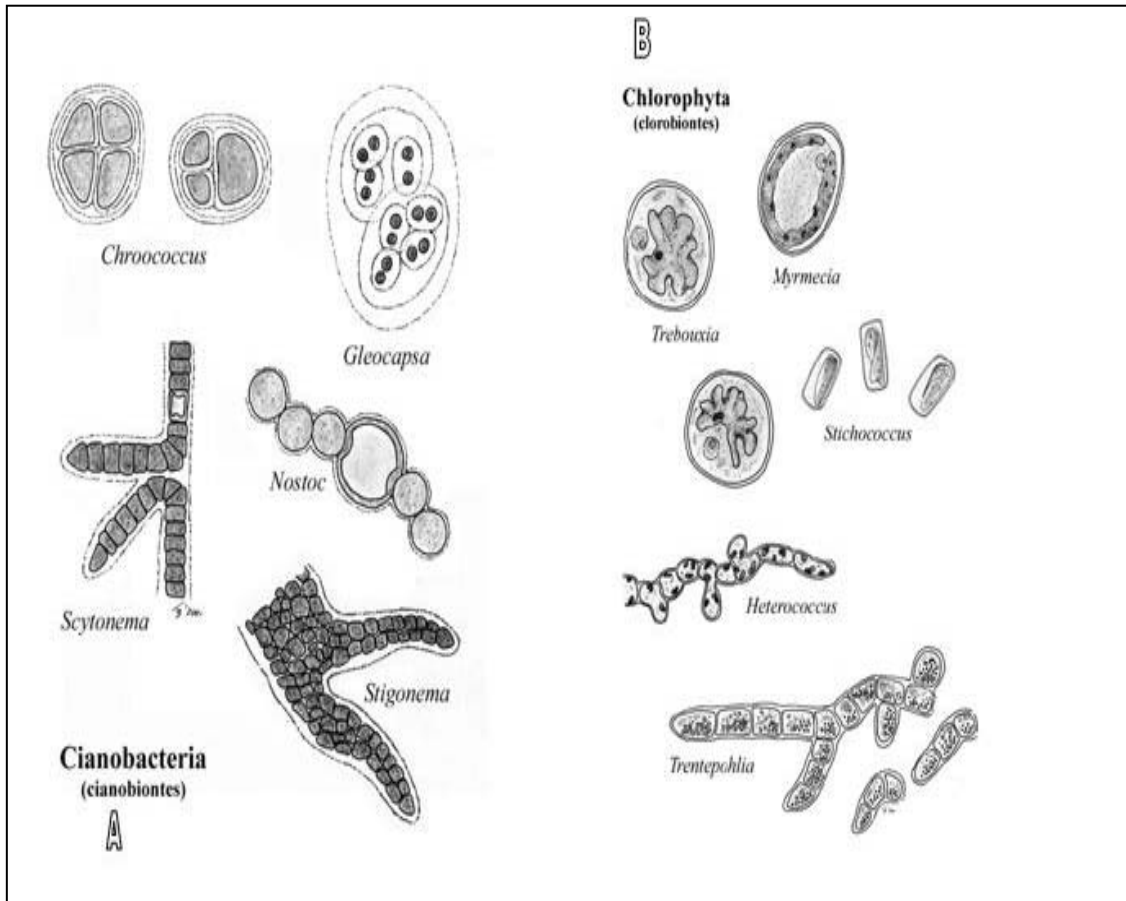
## *Fotobionte*

Las algas presentes en los talos liquénicos reciben diferentes denominaciones como: algas simbióticas, algas liquénicas, componente algal, **fotobionte** o **ficobionte**. La mayoría de las algas simbiotes también se encuentra libre de la simbiosis, es decir que pueden subsistir libremente en la naturaleza en donde se reproducen sexual y asexual y se comportan como simbiotes facultativos en la asociación liquénica (Bungartz 2002a, Nash III 2008a).

Los géneros *Trebouxia*, *Trentepohlia* y *Nostoc* son los fotobiontes más frecuentes, y de amplia distribución en las asociaciones liquénicas. *Trebouxia* y *Trentepohlia* son eucarióticos y pertenecen a las **algas verdes** (Fig. 3); *Nostoc* pertenece al grupo de

bacteria oxígeno-fotosintética (**cianobacteria**, Fig. 3). Cuando un alga se encuentra asociada con un micobionte no se reproduce sexualmente, sino asexualmente.

Las cianobacterias son de naturaleza procariótica, no tienen cloroplastos, mitocondrias ni núcleo (Nash III 2008a, Nash III et al. 2002).



**Figura 3. A, cianobacterias** - cianobiontes (procariotas), verde azuladas común en la simbiosis de los líquenes. **B, Clorófitas**–clorobiontes (eucariota) común en la simbiosis de los líquenes (Nash III et al. 2002).

## *El talo*

Los talos liquénicos son sistemas emergentes que generan una gran variedad de estructuras vegetativas, formas de crecimiento, reproducción y biotipos especiales.

### Forma de crecimiento de los líquenes

En los líquenes se puede distinguir tres formas de crecimiento principales: crustáceo, foliáceo, y fruticuloso (Fig. 4).



**crustáceo**

*Buellia galapagona*



**foliáceo**

*Parmotrema dominicanum*



**fruticuloso**

*Cladonia confusa* f. *bicolor*

**Figura 4.** Los tres tipos de crecimiento de los líquenes; crustáceo; foliáceo; fruticuloso.

### Talo crustáceo

Se encuentran siempre en estrecho contacto con el sustrato del cual no se pueden separar sin ser destruidos. Carecen de córtex inferior o de órganos de sujeción: se sujetan al sustrato por medio de la médula o de un hipotalo. La variabilidad morfológica y anatómica del talo es grande: leproso, continuos, rimoso, rimoso-areolado, areolado, o escumuloso. Hay transiciones de unos tipos por el talo foliáceo, por ejemplo, los líquenes placodioides que están lobulados en el margen, pero areolado en el centro.

### Talo foliáceo

Son laminares, generalmente tendidos sobre el sustrato, estratificados, con organización dorsiventral y cara inferior diferenciada. Suelen estar lobulados distintos no solamente en los márgenes. Sus lóbulos son separables del sustrato al cual pueden estar muy o laxamente adheridos, pero siempre constan de algún órgano de sujeción como rizinas. Hay transiciones con el tipo fruticuloso, unos de los líquenes foliáceos tienen lóbulos muy estrechos parecido a un talo fruticuloso, pero todavía en forma dorsiventral con una capa superior e inferior y una anatomía interna diferenciada.

### Talo fruticuloso

Sobresalen siempre del sustrato, al que sujetan a veces por una mínima superficie, discos basales o hapterios. Por lo general son distintamente ramificados, con aspecto de pequeños arbustos o bien con lóbulos que se estrechan y alargan profundamente. En ocasiones son cortos y casi simples. Pueden ser erectos, colgantes, ascendentes, resupinados o reptantes. Los ejes de las ramificaciones o los lóbulos pueden ser cilíndricos o aplastados y de organización radial; sólo en algunas ocasiones son dorsiventrales (ej. *Ramalina*). Muchos talos fruticulosos son dimorficos, por ejemplo las especies de *Cladonia* o de *Stereocaulon* que tienen un talo primario crustoso o escuamuloso y un talo secundario fruticuloso.

### Plecténquimas

Los líquenes no forman tejidos reales con células isodiamétricos, pero pseudotejidos, es decir formando por hifas filamentosas bien agrupadas. Estos se llaman **plecténquimas** o falsos tejidos y son formados por el micobionte, mediante entrelazamiento, anastomosis, ramificación, gelatinización de las paredes celulares y, en ocasiones, agregación de las hifas, pero siempre realizan de forma postgénita, es decir, no hay zonas meristemáticas reales, sólo actividad de células apicales. Se reconocen los siguientes tipos básicos: **paraplecténquimas**, **prosoplecténquimas**, **escleroplecténquimas**, en empalizada. La complicación estructural y la consistencia son aún mayores por las posibles combinaciones de hifas con células cuya forma, luz y pared son variadas.

## Órganos apendiculares

Son formaciones producidas por el micobionte, que al proyectarse desde la cara inferior, sirven para sujetar el talo al sustrato.

Las **rizinas** son el modo más común de sujeción. Se componen de grupos de hifas compactadas, simples o ramificadas, (del mismo color que la cara inferior).

El **tomento** se forma por la prolongación desde el córtex superior o inferior de hifas hialinas (pelos) u oscuras, cortas o largas, dispersas o densamente agrupadas, que proporciona aspecto pubescente a las superficies.

Los **cilios** son prolongaciones fúngicas desde el córtex superior o del margen de los talos de hifas empaquetadas y lisas; sin embargo, las muy similares fibrillas en el género *Usnea*, contienen fotobiontes.

## Cifelas, pseudocifelas, máculas y cefalodios

Las **cifelas** sólo se conocen en el género *Sticta*, y son excavaciones en la cara inferior del talo con anatomía compleja y recubierta por un borden especial llamado anillo. En las **pseudocifelas** en cambio no hay un anillo; estas pueden aparecer en las dos caras del talo y consisten en la interrupción del córtex por la proliferación de hifas medulares, manifestándose como poros o líneas mas claras que, en ocasiones, se transforman en soralios.

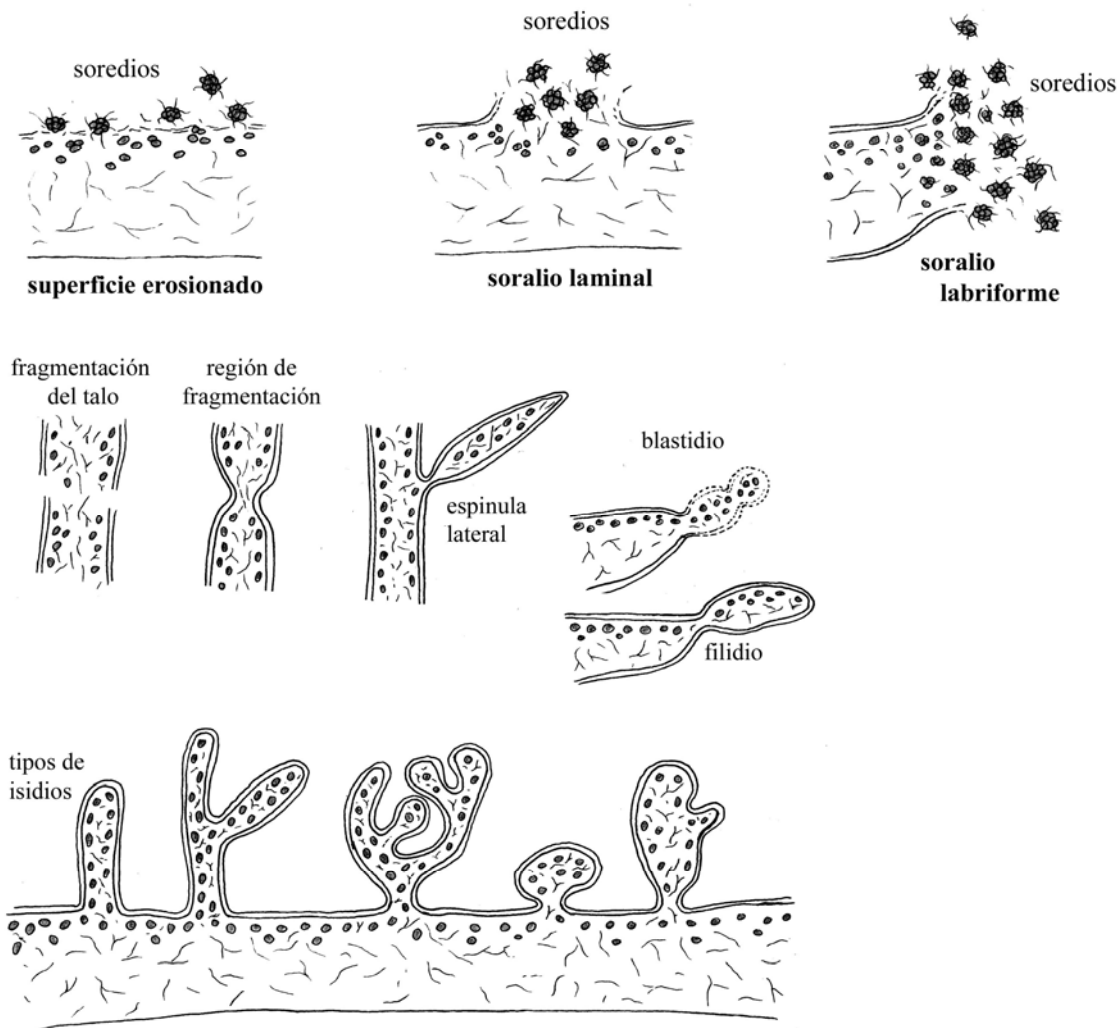
Las **maculas**, son manchas blancas y pequeñas de la cara superior del talo, se deben a la distribución irregular de los fotobiontes y no corresponden a ninguna rotura en el córtex ni a prolongaciones de paquetes de hifas.

Los **cefalodios** son estructuras bien delimitadas, constituidas por un fotobionte distinto (cianobacteria) de lo que forma el talo principal, situándose unas veces en la médula y otras en la cara superior o inferior de los talos.

## Estructuras reproductoras

### Soredios y isidios

En los propágulos típicamente líquénicos, ambos simbiontes actúan como unidades duales autónomas y separables del talo, de tal forma que favorecen la dispersión del líquen y actúan como diásporas vegetativas. Las ventajas de la reproducción **asexual** para colonización del medio que tienen propágulos simbióticos son indudables, ya que aseguran la presencia de los dos simbiontes. Los propágulos vegetativos más comunes son los **soredios** y los **isidios** (Fig. 5).



**Figura 5. Soredios:** unidad de dispersión en los líquenes formando por grupos de células algales e hifas del hongo en los líquenes, sin córtex. **Isidios:** propágulos corticados de los líquenes de forma cilíndrica o ramificada (Ryan et al. 2002).

La reproducción vegetativa se produce también por partición o fragmentación del talo que, al secarse, se fractura fácilmente sobre todo en el caso de los talos fruticulosos. Se

crean así unidades no especializadas de diseminación que son dispersadas por el viento o por animales.

### Los picnidios

Además la reproducción asexual se lleva a cabo en unas estructuras llamadas **picnidios**. Estas son tapizadas de filamentos llamados **conidióforos**, los cuales son simples o ramificados. Los **conidióforos** producen **esporas** unicelulares llamadas **conidias** que salen por una abertura denominada **ostíolo** (Fig. 6). Los **picnidios** se encuentran embebidos en el talo y sólo es evidente el ostíolo. En algunos casos se elevan, constituyendo pequeñas verrugas, y en otros, pueden ser pedunculados y ramificados. Aun el carácter de las picnidios para la reproducción todavía no está bien entendido. Mientras unos de los conidias se ha observado al germinar otras probablemente funcionan en la reproducción sexual como células de fertilización macho llamando espermatias.

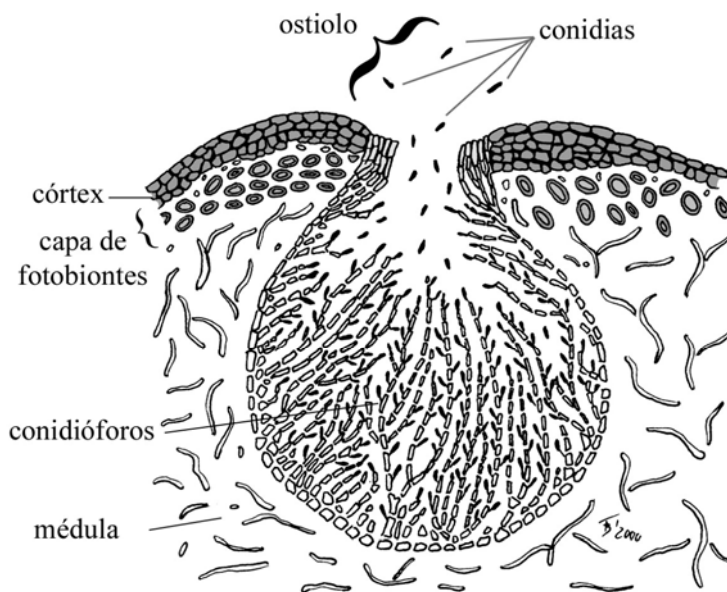


Figura 6. El picnidio (Bungartz 2002c).

## Apotecios y peritecios

El micobionte de los líquenes de los Ascomycetes forma estructuras reproductivas o cuerpos fructíferos en dos formas principales: los **apotecios** (forma de disco) o los **peritecios** (forma esférica). Estos cuerpos fructíferos contienen una capa de **ascos** donde se producen esporas por meiosis. Estas ascosporas son incapaces de convertirse en un líquen, a menos de que se asocien con las células de algas adecuadas.

### El peritecio

Los **peritecios** encierran los ascos siempre en una cavidad. Son  $\pm$  globosos, con el himenio contenido en la cavidad conectada al exterior a través de un **ostíolo** alargado con **perífisis**; el **exípulo** (= *sobre del peritecio* o *paredes del peritecio*) suele estar carbonizado o no carbonizado, en ocasiones, el **ostíolo** puede estar rodeado por un anillo exterior denominado el **involucrelo** (Fig. 7).

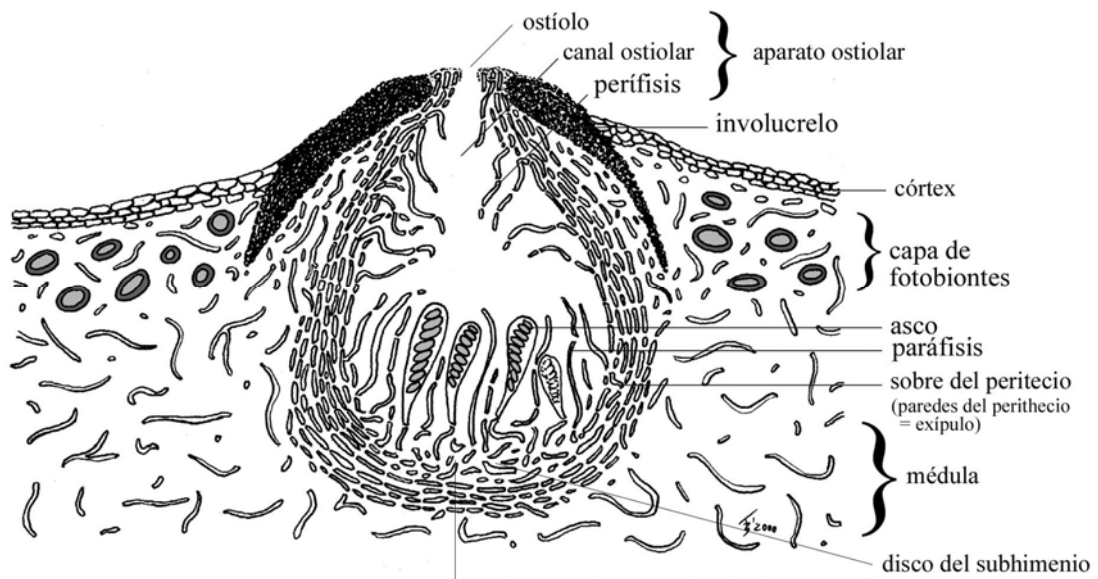


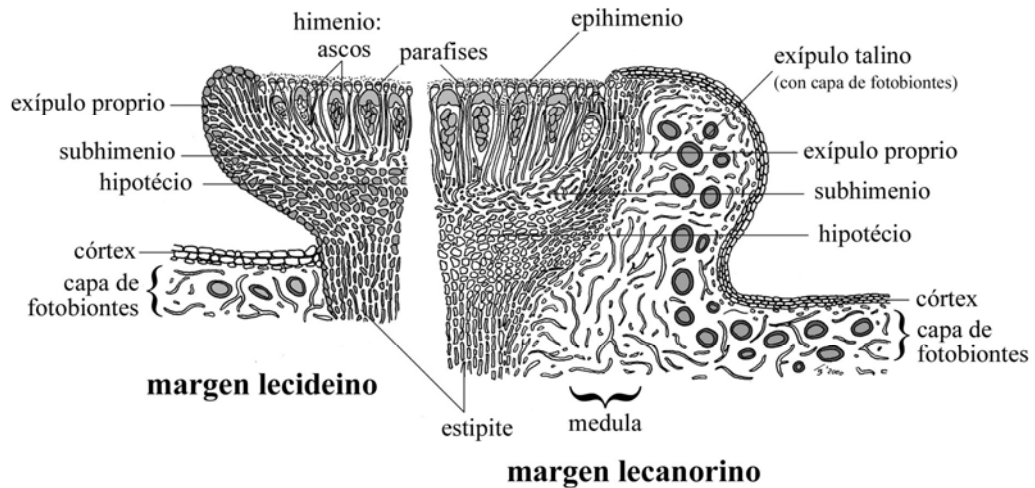
Figura 7. Morfología del peritecio (Bungartz 2002d).

### El apotecio

La mayoría de los líquenes se reproducen mediante la formación de **apotecios**. Son estructuras abiertas con forma de copa o de disco con su himenio expuesto al exterior. Se distinguen dos tipos principales: (1) *biatorino*, con un reborde (excípulo) originado por las hifas del ascoma (margen propio); sí el margen propio está carbonizado este tipo se llama *lecideino*; (2) *lecanorino*, con reborde originado por el talo con córtex y capa de fotobiontes (margen talino); por este tipo unos autores



también usan *zeorino* si el margen propio es todavía visible dentro del margen talino (Fig. 8).



**Figura 8.** Esquema para diferenciar los dos tipos principales de apotecios: margen lecideino y margen lecanorino (Bungartz 2002d).

### El asco

El **asco** (=asca) es una estructura en forma de un saco que contiene ascósporas endógenas de origen sexual y es característico de los *Ascomycetes*. Procede de la transformación de células apicales de hifas

El **aparato apical** está formado por el engrosamiento de la capa más interna de la pared del asco y muestra una gran variabilidad de importancia taxonómica. Aunque varios grupos presentan este tipo básico de asco, el más común y generalizado es el denominado tipo lecanoreano, donde se puede diferenciar: un engrosamiento amiloide apical de la capa interna, el tholus; cámara ocular y una masa axial (Fig. 9). La mayoría de los hongos liquenizados tienen este tipo de ascos.

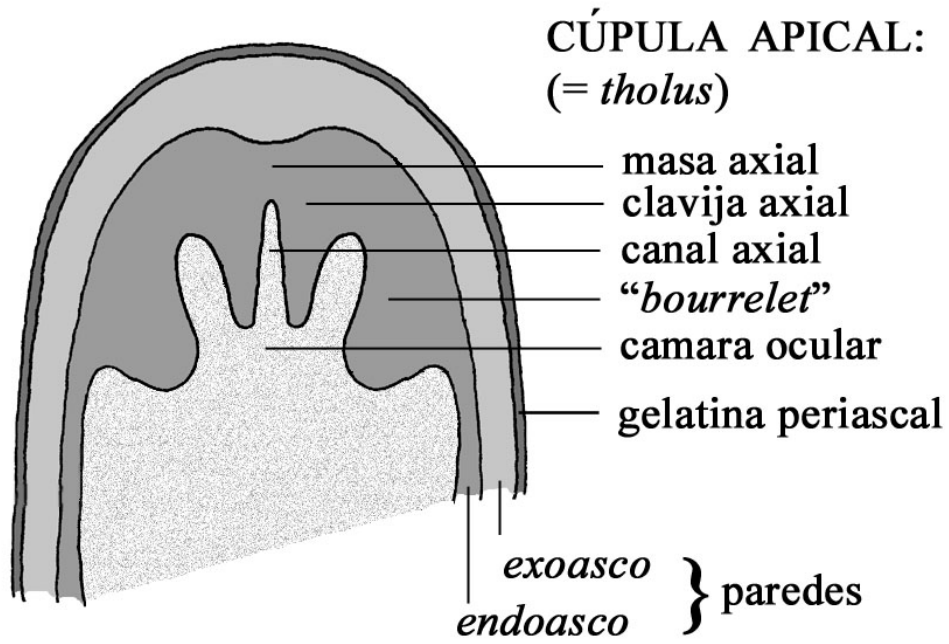


Figura 9. Tipo de asco y tipo de aparato apical (Bungartz 2002d).

### Las ascósporas

Las esporas de los ascolíquenes se producen de forma endógena (dentro los ascos). Para su estudio se deben tener en cuenta las siguientes características: longitud; constitución (simples o septadas); color (hialinas u oscuras); forma (elipsoides, globulares, vermiformes, claviformes), entre otros (Fig. 10).

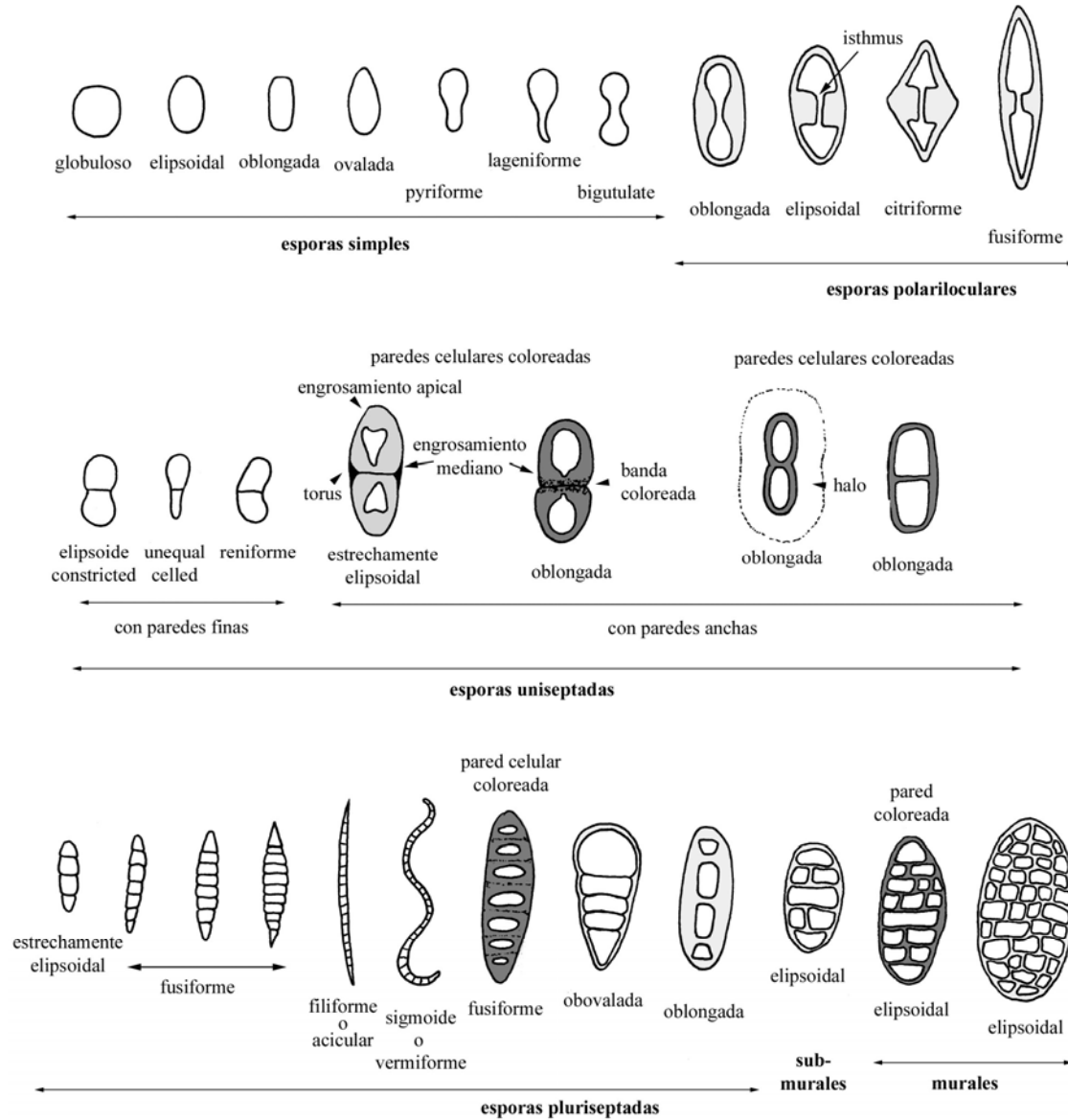


Figura 10. Variedades de ascósporas (Bungartz 2002d).

## *Bioquímica de los Líquenes*

### **Sustancias secundarias de los líquenes**

Hay unos productos químicos básicos para los diferentes colores, debido a la acumulación de metabolitos secundarios y esta presente en todo el líquen excepto en el córtex inferior y en la capa de fotobiontes.

La mayoría son incoloras, excepto las derivadas del ácido pulvínico y la antraquinona; son insolubles en agua, pero solubles en alcohol, éter, acetona y cloroformo y cristalizan por evaporación del solvente. Algunas dan **reacciones coloreadas** con el hidrato de potasio (K), el hipoclorito (C), los ácidos nítrico y clorhídrico, el cloruro férrico y la parafenildiamina (PD). Estas reacciones son de un gran valor taxonómico.

**Clasificación;** a) sustancias de la serie **alifática**: sustancias ácidas que no dan reacciones coloreadas; b) sustancias de la serie **alicíclica, triterpenoides**: compuestos cíclicos, saturados neutros, no dan reacciones coloreadas, los más importantes son: ácido ursólico, en varias especies de *Cladonia*, ácido zeórico, en *Lecanora*; c) sustancias de la serie **aromática**: 1) derivados del ácido pulvínico, amarillos o anaranjados, no se colorean con reactivos de la liquenología ej. ácido vulpínico en *Chrysothrix*, *Candelariella*, *Candelaria*; 2) derivados de la antraquinona, amarillos, anaranjados o rojos, coloreables de púrpura con la potasa ej. en *Xanthomendoza*, *Xanthoria*, *Caloplaca* spp.; 3) derivados del benzo-furano, con propiedades antibióticas ej. ácido úsnico en *Usnea* spp., estrepsilina en *Cladonia strepsilis*, se colorea de azul-verdoso con el hipoclorito; 4) dépsidos y depsidonas, agrupan a la mayoría de las sustancias liquénicas, y presentan una gran especificidad, son incoloras, pero muchas dan reacciones coloreadas y todas derivan de dos difenoles, orcinol y beta-orsinol; a) dépsidos derivados del orcinol, ácido lecanórico, rojo carmín con el hipoclorito, ácido olivetórico, naranja con el hipoclorito; b) dépsidos derivados del beta. orcinol; ácido barbático, en *Cladonia*; c) depsidonas derivadas del orcinol, rojas con la potasa tras el hipoclorito, ácido fisódico; d) depsidonas derivadas del beta-orsinol, amarillas con la parafenilenina, ácido psorómico; 5) compuestos heterocíclicos nitrogenados ej. picrorocelina en *Roccella* (Orange et al. 2001).

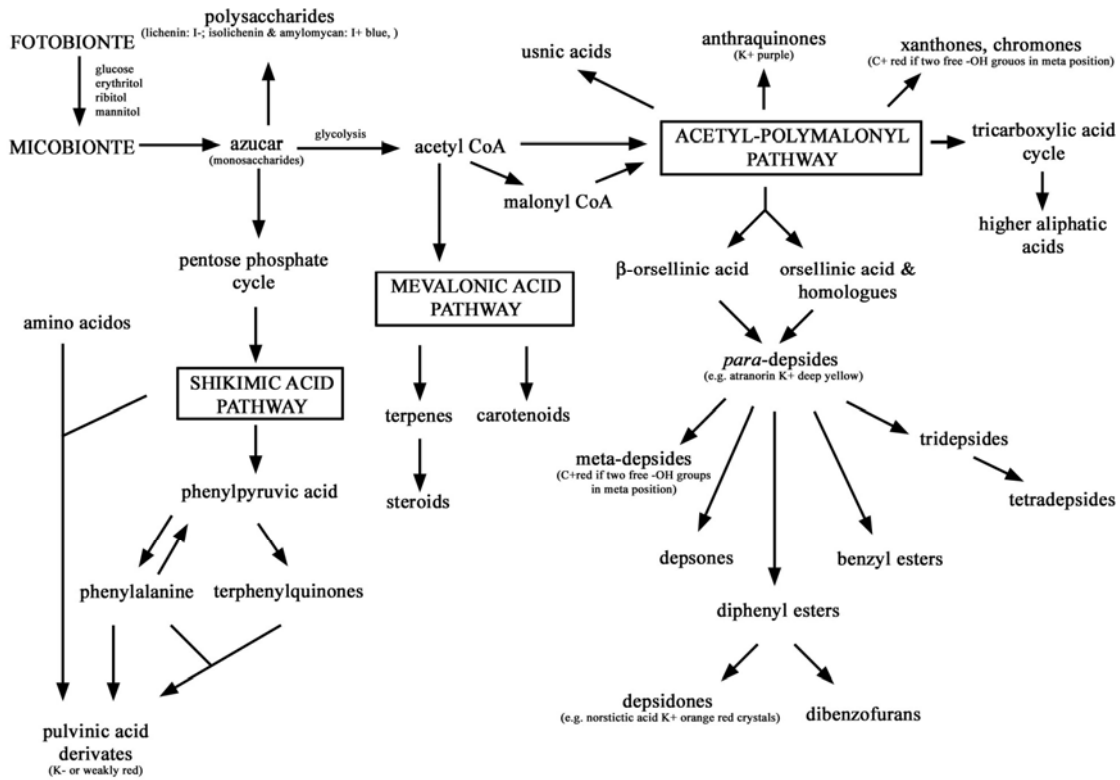


Figura 11. Sustancias secundarias de los líquenes (Bungartz 2002b).

### Tests microquímicos

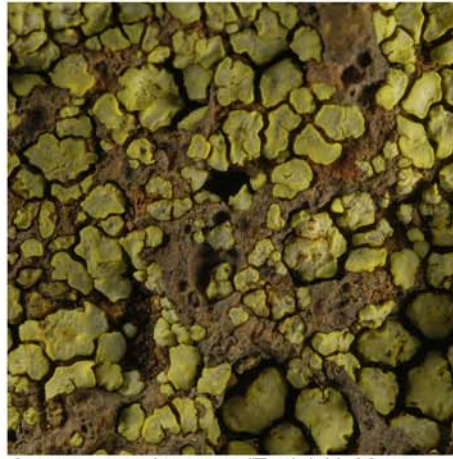
Muchas sustancias líquénicas pueden ser detectadas microscópicamente gracias a los colores que adquieren al ser puestas en contacto con diversos reactivos químicos, o a la fluorescencia que producen bajo las radiaciones UV de longitud de onda ( $\lambda$ ) 254 nm. Estos caracteres no son suficientes para la separación entre especies, pero son de gran valor en la identificación de las mismas.

- K (solución 10% de hidróxido de potasio en agua. Reaccionando desde amarillo hasta el rojo (no confundirse con una reacción pardo que podría ser causada por el daño de células con KOH después una aplicación por mucho tiempo).
- C (solución de hipoclorito; lejía de cloro comercial sin diluir). Dando coloraciones rosas, rojas, naranjas o verdes.
- KC o CK. En este caso se aplica primero un reactivo y a continuación el otro. Se puede observar reacciones similares a los con C o K, pero típicamente mas fuertes.

- PD (cristales de parafenilendiamina disueltos en alcohol; o como solución de Steiner). Reaccionando desde amarillo al rojo ferruginoso. Es muy volátil y mancha la piel, la ropa y el papel, y causa cáncer. Por eso hay que tener mucha precaución en el uso.
- I (solución iodada, 0,5-1,5 de IKI = Solución de Lugol). Da coloraciones azuladas, verdosas o rojizas; es especialmente útil para la diferenciación de las estructuras del asco (paredes, tholus, capa periascal) o de la gelatina del himenio. Típicamente aplicado una vez antes (hemiamiloide) y después de la aplicación de K (holoamiloide). Cuando la coloración es muy intensa se debe pasar agua para diluirla y poder observar mejor las estructuras. También se usa como *test* reactivo de la médula o de las esporas.
- UV. se aplica fluorescencia bajo las radiaciones UV a una longitud de onda ( $\lambda$ ) 254 nm.



*Acantholichen pannarioides* P.M. Jørg.



*Acarospora chrysops* (Tuck.) H. Magn.



*Agonimia tristicula* (Nyl.) Zahlbr.



*Alyxoria ochrocheila* (Nyl.) Ertz & Tehler



*Alyxoria ochrocheila* (Nyl.) Ertz & Tehler



*Angiactis spinicola* Aptroot & Sparrius



*Anisomeridium albisedum* (Nyl.) R.C. Harris



*Anisomeridium biforme* (Borrer) R.C. Harris



*Anisomeridium leptospermum* (Zahlbr.) R.C. Harris



*Anisomeridium polypori* (Ellis & Everh.) M.E. Barr



*Anisomeridium subprostans* (Nyl.) R.C. Harris



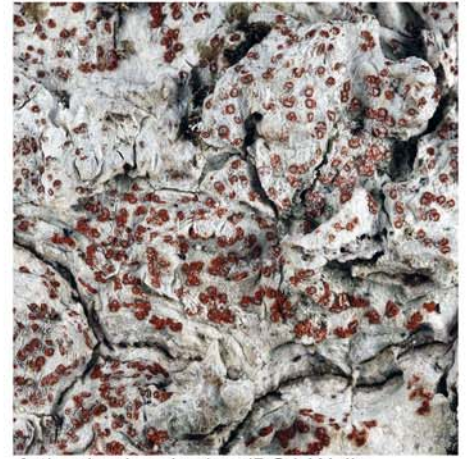
*Anisomeridium tamarindi* (Fée) R.C. Harris



*Anisomeridium tuckerae* R.C. Harris



*Arthonia antillarum* (Fée) Nyl.



*Arthonia cinnabarina* (DC.) Wallr.



*Arthonia speciosa* (Müll. Arg.) Grube



*Arthothelium galapagoense* Huneck & Follmann



*Aspidothelium cinerascens* Vain.



*Astrothyrium rotuliforme* (Müll. Arg.) Sérus. & J.R. De Sloover



*Astrothelium variolosum* (Ach.) Müll. Arg.



*Astrothelium variolosum* (Ach.) Müll. Arg.



*Aulaxina opegraphina* Fée



*Bactrospora acicularis* (C.W. Dodge) Egea & Torrente



*Bactrospora brevispora* R.C. Harris





*Bactrospora denticulata* (Vain.) Egea & Torrente



*Bactrospora myriadea* (Fée) Egea & Torrente



*Bathelium degenerans* (Vain.) R.C. Harris



*Bathelium feei* (C.F.W. Meissn.) Aptroot



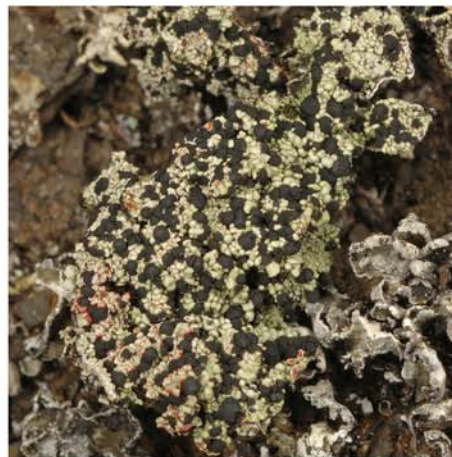
*Brigantiaea leucoxantha* (sorediate form) (Spreng.) R. Sant. & Hafellner



*Brigantiaea leucoxantha* s.str. (Spreng.) R. Sant. & Hafellner



*Buellia* cf. *stellulata* (Taylor) Mudd



*Buellia coccinea* s.l. (Fée) Aptroot



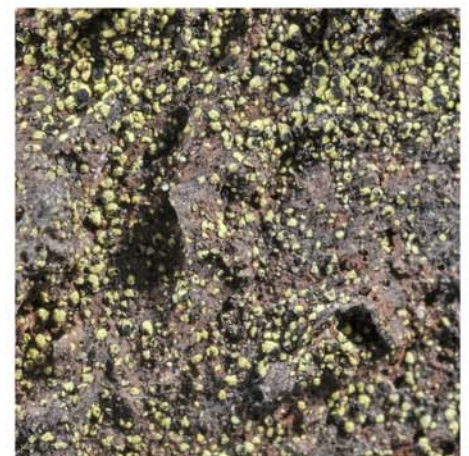
*Buellia galapagona* W.A. Weber



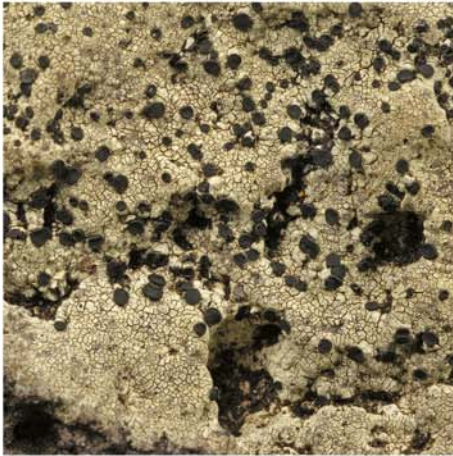
*Buellia mamillana* s.l. (Tuck.) W.A. Weber



*Buellia straminea* Tuck.



*Buellia sulphurica* Bungartz & Aptroot



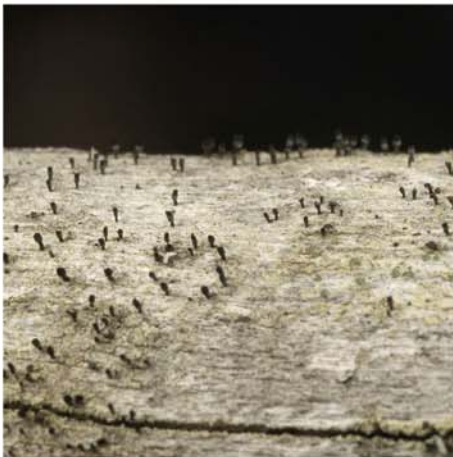
*Buellia trachyspora* Vain.



*Bulbothrix laevigatula* (Nyl.) Hale



*Bulbothrix lyngei* Benatti & Marcelli



*Calicium robustellum* Nyl.



*Calopadia editae* Vězda ex Chaves & Lücking



*Calopadia foliicola* (Fée) Vězda



*Calopadia puiggarii* (Müll. Arg.) Vězda



*Calopadia subcoerulescens* (Zahlbr.) Vězda



*Caloplaca aphanotripta* (Nyl.) Zahlbr.



*Caloplaca brouardii* (de Lesd.) Zahlbr.



*Caloplaca camptidia* (Tuck.) Zahlbr.



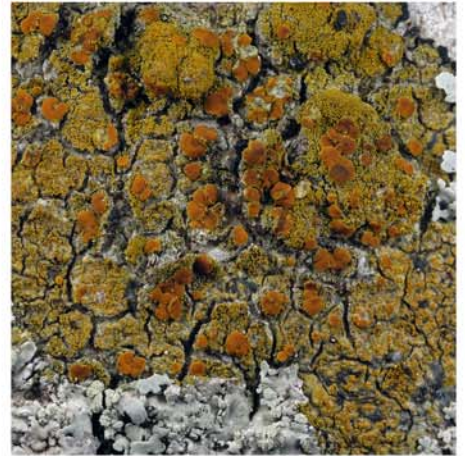
*Caloplaca cupulifera* (Vain.) Zahlbr.



*Caloplaca diplacia* (Ach.) Riddle



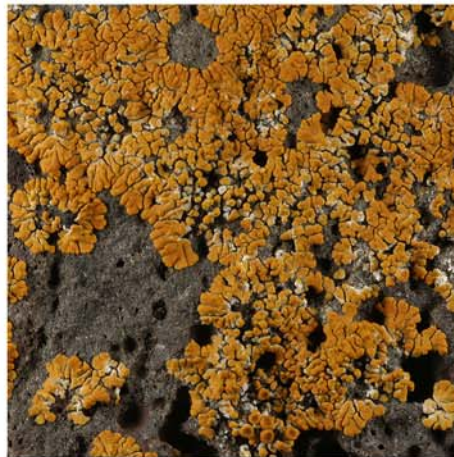
*Caloplaca diplacia* (Ach.) Riddle



*Caloplaca epiphora* (Taylor) C.W. Dodge



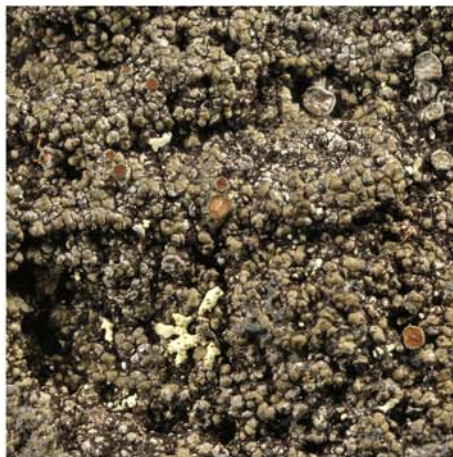
*Caloplaca floridana* (Tuck.) S.C. Tucker



*Caloplaca isidiosa* (Vain.) Zahlbr.



*Caloplaca phyllidizans* Wetmore



*Caloplaca sideritis* (Tuck.) Zahlbr.



*Caloplaca wrightii* (Willey) Fink



*Candelariella corallizoides* Westberg



*Canoparmelia caroliniana*



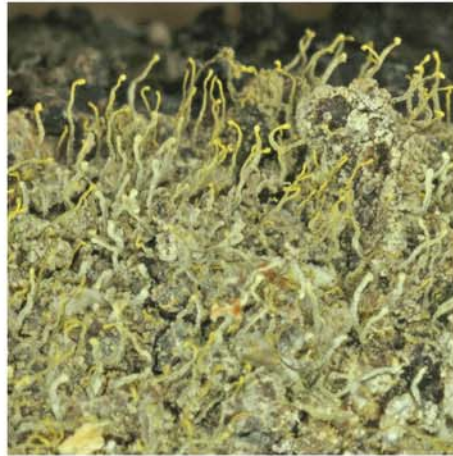
*Canoparmelia raunkiaeri*



*Canoparmelia texana*



*Chaenotheca brunneola* (Ach.) Müll. Arg.



*Chaenotheca chloroxantha* Tibell



*Chaenothecopsis savonica* s.l.  
(Räsänen) Tibell



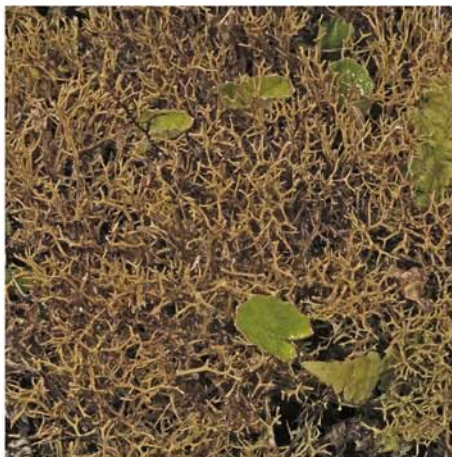
*Chiodecton malmei* G. Thor



*Chrysothrix occidentalis* Elix & Kantivalis



*Chrysothrix xanthina* (Vain.) Kalb



*Cladia aggregata* (Sw.) Nyl.



*Cladonia arbuscula* ssp. *boliviana* Ahti



*Cladonia arcuata* Ahti



*Cladonia bungartzii* Stenroos & Ahti



*Cladonia cartilaginea* Müll. Arg.



*Cladonia ceratophylla* (Sw.) Spreng.



*Cladonia ceratophylla* (Sw.) Spreng.



*Cladonia chlorophaea* (Flörke ex Sommerf.) Spreng.



*Cladonia confusa* f. *confusa* (R. Sant.) Follmann & Ahti



*Cladonia corniculata* Ahti & Kashiwadani



*Cladonia corymbosula* Nyl.



*Cladonia corymbosula* Nyl.



*Cladonia dactylota* Tuck.



*Cladonia dactylota* Tuck.



*Cladonia didyma* (Fée) Vain.



*Cladonia grayi* G. Merr. ex Sandst.



*Cladonia macilenta* var. *bacillaris* (Genth) Schaer.



*Cladonia macilenta* var. *bacillaris* (Genth) Schaer.



*Cladonia polyscypha* Ahti & L. Xavier



*Cladonia pulverulenta* (L. Scriba) Ahti



*Cladonia pyxidata* (L.) Hoffm.



*Cladonia ramulosa* (With.) J.R. Laundon



*Cladonia scholanderi* Abbayes



*Cladonia sphacelata* Vain.



*Cladonia strepsilis* (Ach.) Vain.



*Cladonia subradiata* (Vain.) Sandst.



*Cladonia subsquamosa* Kremp.



*Coccocarpia domingensis* Vain.



*Coccocarpia erythroxyli* (Spreng.) Swinscow & Krog



*Coccocarpia palmicola* (Spreng.) Arv. & D.J. Galloway



*Coccocarpia palmicola* (Spreng.) Arv. & D.J. Galloway



*Coccocarpia pellita* (Ach.) Müll. Arg.



*Coccocarpia pellita* (Ach.) Müll. Arg.



*Coccocarpia prostrata* Lücking, Aptroot & Sipman



*Coenogonium interplexum* Nyl.



*Coenogonium pineti* (Schrad. ex Ach.) Lücking & Lumbsch



*Coenogonium strigosum* Rivaz Plata, Lücking & Chaves



*Collema furfuraceum* Du Rietz



*Cora glabrata* (Spreng.) Fr.



*Cresponea flava* (Vain.) Egea & Torrente



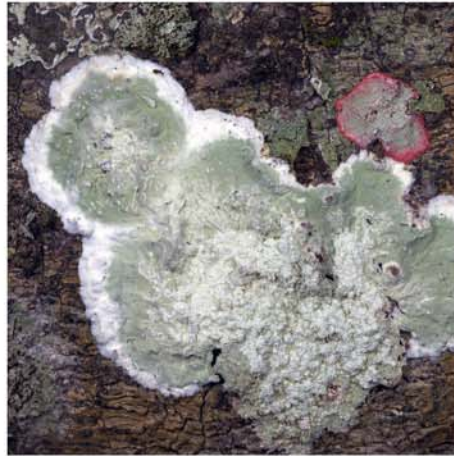
*Cryptothecia assimilis* Makhija & Patw.



*Cryptothecia assimilis* Makhija & Patw.



*Cryptothecia striata* G. Thor (pustulate morphotype)



*Cryptothecia striata* G. Thor s.str.



*Cryptothecia striata* G. Thor s.str.



*Cyphellostereum* sp.



*Dibaeis sorediata* Kalb & Gierl



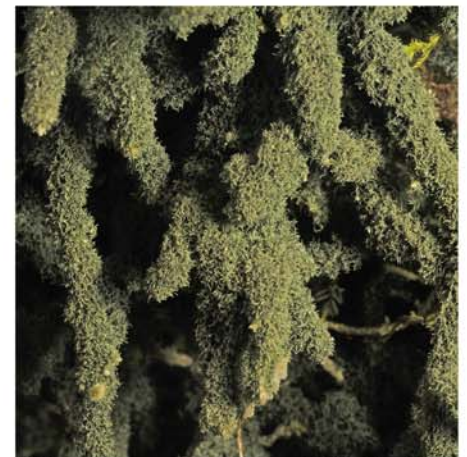
*Dictyographa arabica* Müll. Arg.



*Dictyonema galapagoense* Yáñez, Dal-Forno & Bungartz



*Dictyonema pectinatum* Dal Forno, Yáñez & Lücking



*Dictyonema schenkianum* (Müll. Arg.) Zahlbr.



*Dictyonema sericeum* (Sw.) Berk.



*Dictyonema sericeum* (Sw.) Berk.



*Dimidiographa loandensis* (Nyl.) Ertz, Bungartz & Tehler





*Diorygma poitaei* (Fée) Kalb, Staiger & Elix



*Diploschistes cinereocaesius* (Sw.) Vain.



*Diploschistes euganeus* (A. Massal.) Zahlbr.



*Diploschistes muscorum* ssp. *bartlettii* Lumbsch



*Diploschistes rampoddensis* (Nyl.) Zahlbr.



*Dirina catalinariae* f. *catalinariae* Hasse



*Dirina catalinariae* f. *sorediata* Tehler



*Dirina paradoxa* ssp. *approximata* (Fée) Tehler



*Dirinaria applanata* (Fée) D.D. Awasthi



*Dirinaria confusa* D.D. Awasthi



*Dirinaria neotropica* Kalb



*Dirinaria picta* (Sw.) Schaer. ex Clem.



*Dyplolabia afzelii* (Ach.) A. Massal.



*Endocarpon pallidellum* Ach.



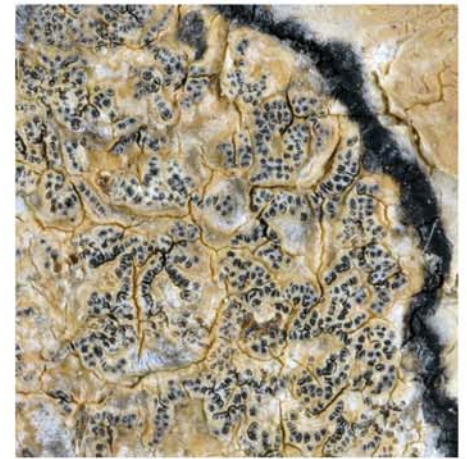
*Endocarpon pusillum* Hedw.



*Enterographa anguinella* (Nyl.) Redinger



*Enterographa pallidella* (Nyl.) Redinger



*Enterographa subserialis* (Nyl.) Redinger



*Erioderma soledium* D.J. Galloway & P.M. Jørg.



*Everniastrum vexans* (Zahlbr. ex W.L. Culb. & C.F. Culb.) Hale ex Sipman



*Fissurina* cf. *comparilis* (Nyl.) Nyl.



*Fissurina columbina* (Tuck.) Staiger



*Fissurina dumastioides* (Fink) Staiger



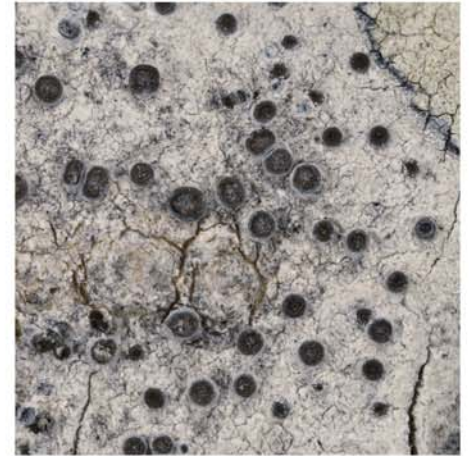
*Flakea papillata* O.E. Erikss.



*Flavoparmelia leucoxantha* (Müll. Arg.)  
Hale ex DePriest & B.W. Hale



*Glyphis cicatricosa* Ach.



*Glyphis scyphulifera* (Ach.) Staiger



*Graphis acharii* Fée



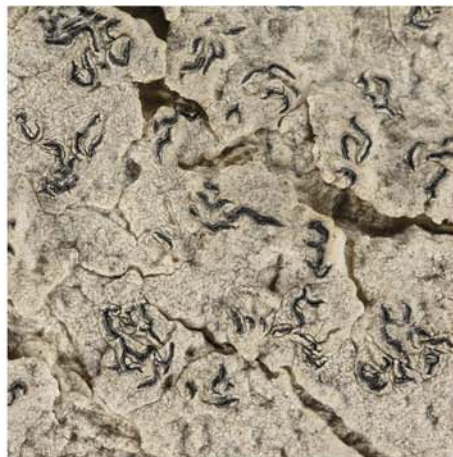
*Graphis acharii* Fée



*Graphis adpressa* Vain.



*Graphis anfractuosa* (Eschw.) Eschw.



*Graphis caesiella* Vain.



*Graphis cincta* (Pers.) Aptroot



*Graphis cleistomma* Nyl.



*Graphis crebra* Vain.



*Graphis elongata* Vain.



*Graphis elongata* Vain.



*Graphis flavominiata* Moncada & Lücking



*Graphis glaucescens* Fée



*Graphis intricata* Fée



*Graphis leptospora* Vain.



*Graphis pedunculata* Bungartz & Aptroot



*Graphis phaeospora* Vain.



*Graphis rimulosa* (Mont.) Trevis.



*Graphis subchrysocarpa* Lücking



*Graphis subchrysocarpa* Lücking



*Graphis tenella* Ach.



*Graphis vestitoides* (Fink) Staiger



*Gyalideopsis subaequatoriana*



*Haematomma persoonii* (Fée) A. Massal.



*Helminthocarpon leprevostii* Fée



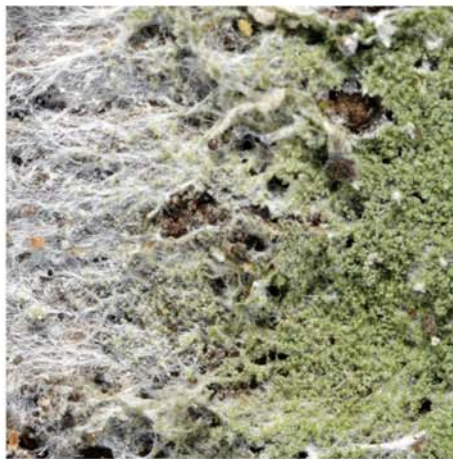
*Heppia despreauxii* (Mont.) Tuck.



*Herpothallon echinatum* Aptroot, Lücking & Will-Wolf



*Herpothallon echinatum* Aptroot, Lücking & Will-Wolf



*Herpothallon granulare* (Sipman) Aptroot & Lücking



*Herpothallon rubrocinctum* (Ehrenb.: Fr.) Aptroot, Lücking & G. Thor



*Herpothallon rubroechinatum* Frisch & G. Thor



*Heterocyphelium leucampyx* (Tuck.) Vain.



*Heterodermia albicans* (Pers.) Swinscow & Krog



*Heterodermia antillarum* (Vain.) Kurok.



*Heterodermia appalachensis* (Kurok.) W.L. Culb.



*Heterodermia circinalis* (Zahlbr.) W.A. Weber



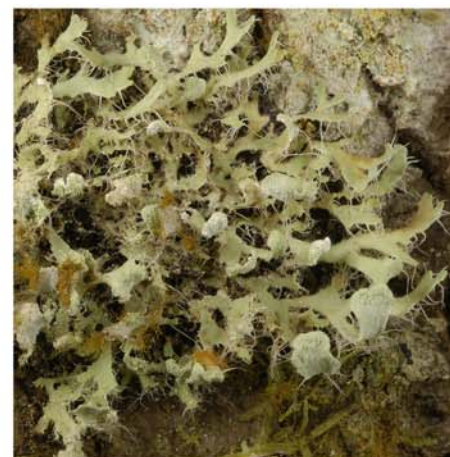
*Heterodermia comosa* (Eschw.) Follmann & Redón



*Heterodermia coralliphora* (Taylor) Skorepa



*Heterodermia diademata* (Taylor) D.D. Awasthi



*Heterodermia galactophylla* (Tuck.) W.L. Culb.



*Heterodermia japonica* (M. Satô) Swinscow & Krog



*Heterodermia leucomela* f. *albociliata* f. (Nyl.) D.D. Awasthi



*Heterodermia obscurata* (Nyl.) Trevis.



*Heterodermia podocarpa* (Bél.) D.D. Awasthi



*Heterodermia squamulosa* (Degel.) W.L. Culb.



*Heterodermia verrucifera* (Kurok.) W.A. Weber



*Hyperphyscia adglutinata* (Flörke) H. Mayrhofer & Poelt



*Hypotrachyna exsplendens* (Hale) Hale



*Hypotrachyna isidiocera* (Nyl.) Hale



*Hypotrachyna microblasta* (Vain.) Hale



*Hypotrachyna osseoalba* (Vain.) Y.S. Park & Hale



*Julella* cf. *asema* R.C. Harris



*Julella geminella* (Nyl.) R.C. Harris



*Lecanactis epileuca* (Nyl.) Tehler



*Lecanographa brattiae* (Egea & Ertz) Ertz & Tehler



*Lecanographa laingiana* Diederich, Egea & Sipman



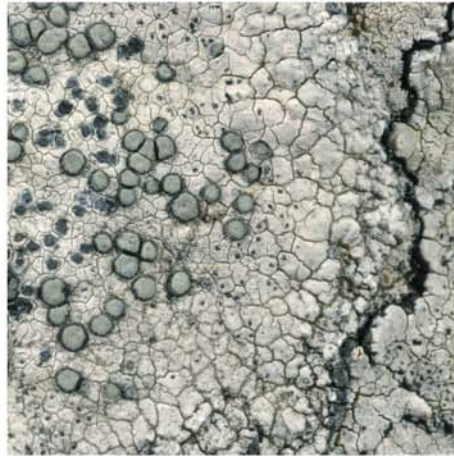
*Lecanographa lyncea* (Sm.) Egea & Torrente



*Lecanographa microcarpella* (Müll. Arg.) Egea & Torrente



*Lecanographa subcaesioides* Egea & Torrente



*Lecanora avium* (Zahlbr.) Hertel



*Lecanora caesiorubella* Ach.



*Lecanora floridula* Lumbsch



*Lecanora galactiniza* Nyl.



*Lecanora legalloana* Elix & Øvstedal



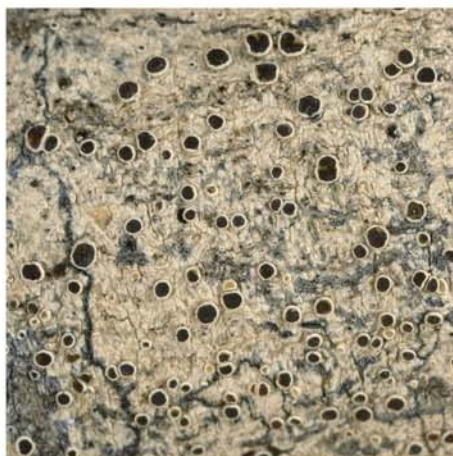
*Lecanora leprosa* Fée



*Lecanora oreinoides* (Körb.) Hertel & Rambold



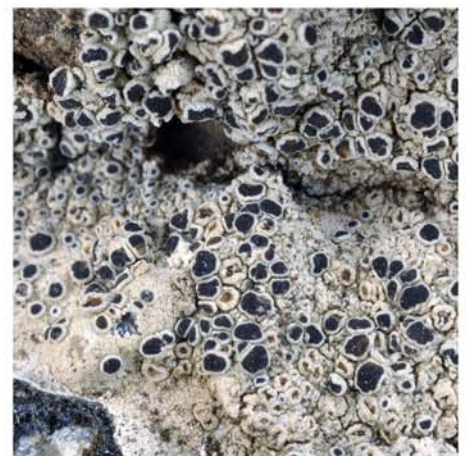
*Lecanora pseudopinguis* W.A. Weber



*Lecanora schindleri* Guderley



*Lecanora subcrenulata* Müll. Arg.



*Lecanora subimmergens* Vain.





*Lecanora subimmersa* ssp. *subimmersa* (Fée) Vain.



*Lecanora substrobilina* Printzen



*Lecanora sulfurescens* Fée



*Lecanora tropica* Zahlbr.



*Leiorreuma sericeum* (Eschw.) Staiger



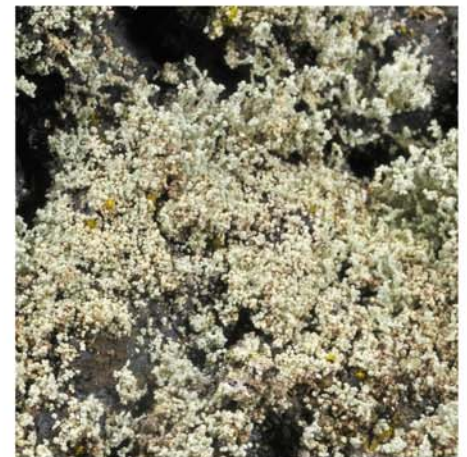
*Lepraria finki* (B. de Lesd.) R.C. Harris



*Lepraria usnica* Sipman



*Lepraria vouauxii* (Hue) R.C. Harris



*Leprocaulon tenellum* (Tuck.) Nyl.



*Leptogium azureum* (Sw. ex Ach.) Mont.



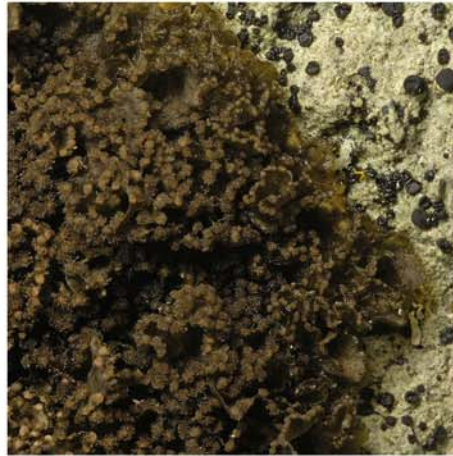
*Leptogium cyanescens* (Pers.) Körb.



*Leptogium javanicum* (Mont. & Bosch) Mont.



*Leptogium javanicum* (Mont. & Bosch) Mont.



*Leptogium marginellum* (Sw.) Gray



*Leptogium marginellum* (Sw.) Gray



*Leptogium phyllocarpum* (Pers.) Mont.



*Leptogium punctulatum* Nyl.



*Leucodecton occultum* (Eschw.) Frisch



*Leucodecton subcompunctum* (Nyl.) A. Frisch



*Lithothelium fluorescens* Aptroot & Sipman



*Lithothelium illotum* (Nyl.) Aptroot



*Lithothelium microsporum* R.C. Harris



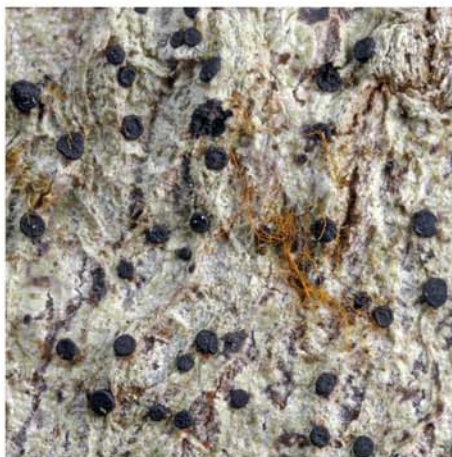
*Lobaria patinifera* (Taylor) Hue



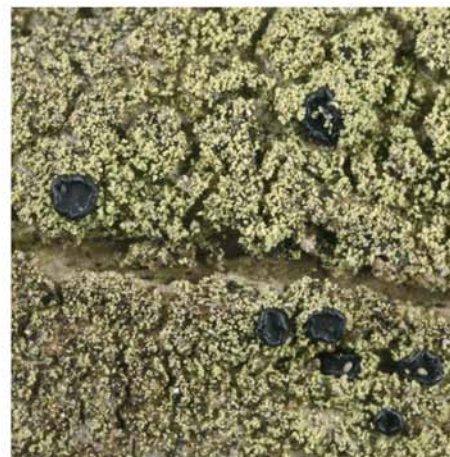
*Lobariella pallida* (Hook. f.) Moncada & Lücking



*Lobariella pallida* (Hook. f.) Moncada & Lücking



*Malcolmiella polycampia* (Tuck.) Cáceres & Lücking



*Megalaria bengalensis* Jagadeesh, Aptroot, G.P. Sinha & Kr.P. Singh



*Megalospora galapagoensis* Bungartz, Ziemmeck & Lücking



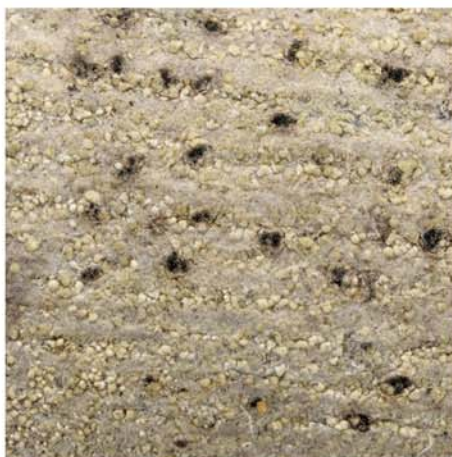
*Mycocalicium americanum* (R. Sant.) Tibell



*Mycomicrothelia subfallens* (Müll. Arg.) D. Hawksw.



*Mycomicrothelia thelena* (Ach.) D. Hawksw.



*Mycoporum compositum* (A. Massal.) R.C. Harris



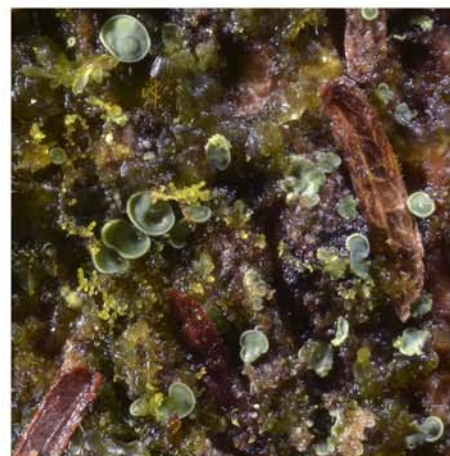
*Mycoporum eschweileri* (Müll. Arg.) R.C. Harris



*Mycoporum sparsellum* Nyl.



*Myriotrema olivaceum* Fée



*Normandina pulchella* (Borrer) Nyl.



*Ochrolechia africana* Vain.



*Opegrapha agelaeotera* Vain.



*Opegrapha astraea* Tuck.



*Opegrapha cactacearum* Riedl



*Opegrapha diagrapa* Nyl.



*Opegrapha difficilior* Nyl.



*Opegrapha herbarum* Mont.



*Opegrapha* sp. nov. 1 "norstictica"



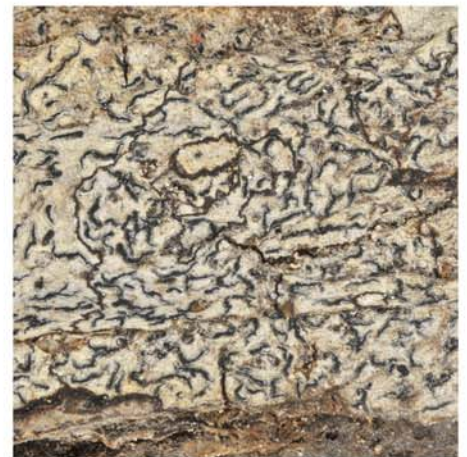
*Opegrapha trilocularis* Müll. Arg.



*Opegrapha trochodes* Coppins, F. Berger & Ertz



*Opegrapha varia* agg. Pers.



*Opegrapha vulgata* (Ach.) Ach.



*Parmeliella pannosa* (Sw.) Müll. Arg.



*Parmelinopsis horrescens*



*Parmotrema aberrans* Vain. & Abbeyes



*Parmotrema clavuliferum* (Räsänen) Streimann



*Parmotrema clavuliferum* (Räsänen) Streimann



*Parmotrema clavuliferum* (Räsänen) Streimann



*Parmotrema conformatum* (Vain.) Hale



*Parmotrema crinitum* (Ach.) M. Choisy



*Parmotrema cristiferum* (Taylor) Hale



*Parmotrema dilatatum* (Vain.) Hale



*Parmotrema dominicanum* (Vain.) Hale



*Parmotrema flavescens* (Kremp.) Hale



*Parmotrema hypotropum* (Nyl.) Hale



*Parmotrema mellissii* (C.W. Dodge) Hale



*Parmotrema reticulatum* (Taylor) M. Choisy



*Parmotrema reticulatum* (Taylor) M. Choisy



*Parmotrema subsidiosum* (Müll. Arg.) Hale



*Parmotrema tinctorum* (Despr. ex Nyl.) Hale



*Parmotrema ultralucens* (Krog) Hale



*Peltigera dolichorrhiza* (Nyl.) Nyl.



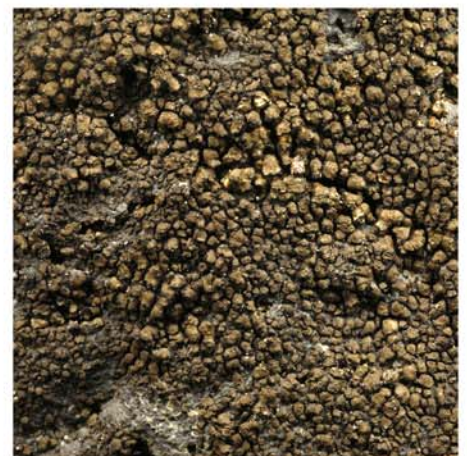
*Peltigera ulcerata* Müll. Arg.



*Peltula euploca* (Ach.) Poelt



*Peltula impressa* (Vain.) Swinscow & Krog



*Peltula obscurans* (Nyl.) Gyeln.



*Pertusaria tejocotensis* B. de Lesd.



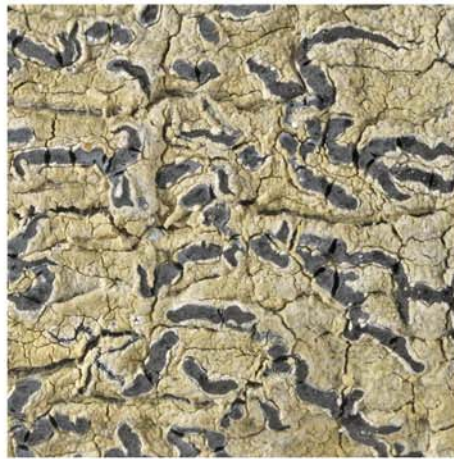
*Pertusaria texana* Müll. Arg.



*Phaeographis atromaculata* (A.W. Archer) A.W. Archer



*Phaeographis decipiens* Müll. Arg.



*Phaeographis dendritica* (Ach.) Müll. Arg.



*Phaeographis fusca* Staiger



*Phaeographis intricans* (Nyl.) Staiger



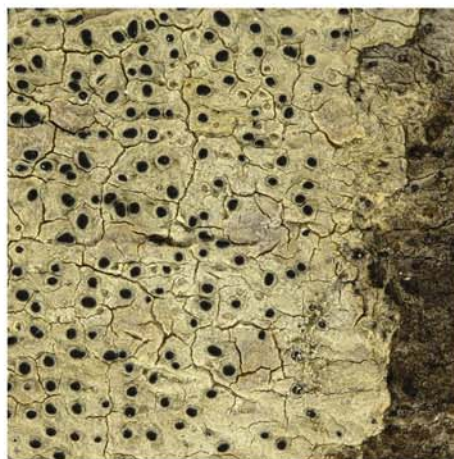
*Phaeographis leiogrammodes* (Kremp.) Müll. Arg.



*Phaeographis lobata* (Eschw.) Müll. Arg.



*Phaeographis major* (Kremp.) Lücking



*Phaeographis punctiformis* (Eschw.) Müll. Arg.



*Phaeographis striata* Bungartz



*Phyllopsora intermediella* (Nyl.) Zahlbr.



*Physcia atrostriata* Moberg



*Physcia atrostriata* Moberg



*Physcia integrata* Nyl.



*Physcia mexicana* de Lesd.



*Physma byrsinum* (Ach.) Müll. Arg.



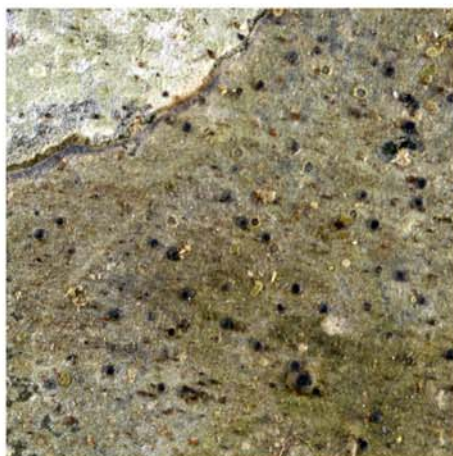
*Piccolia conspersa* (Fée) Hafellner



*Polychidium muscicola* (Sw.) Gray



*Polychidium muscicola* (Sw.) Gray



*Porina atrocoerulea* Müll. Arg.

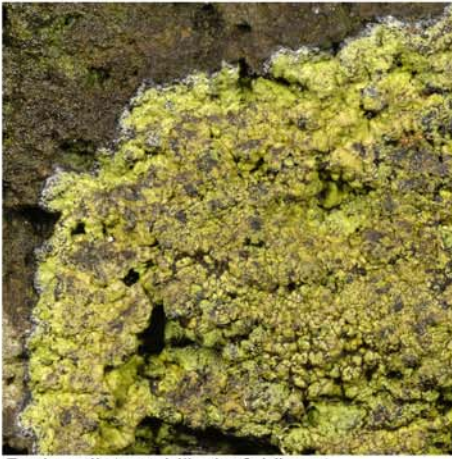


*Porina conspersa* Malme



*Porina cubana* Vězda





*Porina distans* Vězda & Vivant



*Porina guentheri* (Flot.) Zahlbr.



*Porina leptalea* (Durieu & Mont.) A.L. Sm.



*Porina melanops* Malme



*Porina nitidula* Müll. Arg.



*Porina nucula* Ach.



*Porina tetramera* (Malme) R. Sant.



*Pseudocyphellaria argyracea* (Delise) Vain.



*Pseudocyphellaria aurata* (Ach.) Vain.



*Pseudocyphellaria crocata* (L.) Vain.



*Pseudocyphellaria dozyana* (Mont. & Bosch) D.J. Galloway



*Pseudopyrenula diluta* (Fée) Müll. Arg.



*Pseudopyrenula subnudata* Müll. Arg.



*Psorotichia cf. hassei* Fink ex J. Hedrick



*Pyrenographa irregularis* (Wehm.) R.C. Harris



*Pyrenula aff. duplicans* (probably sp nov.)



*Pyrenula anomala* (Ach.) A. Massal.



*Pyrenula aspistea* (Afzel.) Ach.



*Pyrenula astroidea* (Fée) R.C. Harris



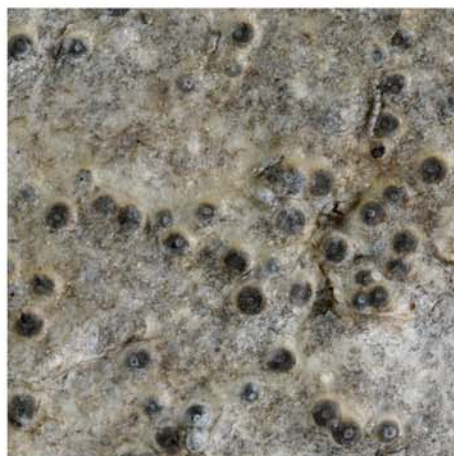
*Pyrenula cerina* Eschw.



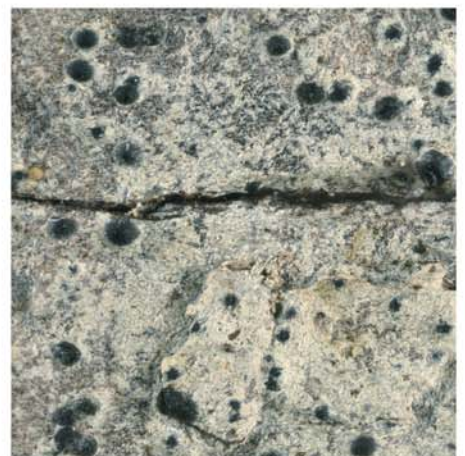
*Pyrenula cf. acutispora* Kalb & Hafellner



*Pyrenula cf. cuyabensis* (Malme) R.C. Harris



*Pyrenula concatervans* (Nyl.) R.C. Harris



*Pyrenula confinis* (Nyl.) R.C. Harris



*Pyrenula confinis* (Nyl.) R.C. Harris



*Pyrenula costaricensis* Müll. Arg.



*Pyrenula cruenta* (Mont.) Vain.



*Pyrenula macularis* (Zahlbr.) R.C. Harris



*Pyrenula marginatula* Müll. Arg.



*Pyrenula massariospora* (Starbäck) R.C. Harris



*Pyrenula microtheca* R.C. Harris



*Pyrenula nitidula* (Bres.) R.C. Harris



*Pyrenula ochraceoflava* (Nyl.) R.C. Harris



*Pyrenula ochraceoflavens* (Nyl.) R.C. Harris



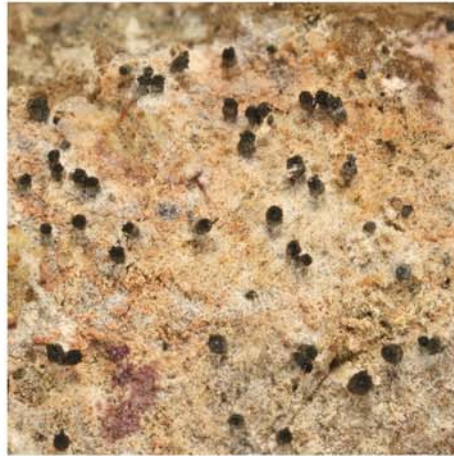
*Pyrenula quassiaecola* Fée



*Pyrenula subcongruens* Müll. Arg.



*Pyrenula thelomorpha* Tuck.



*Pyrgidium montelicum* (Beltr.) Tibell



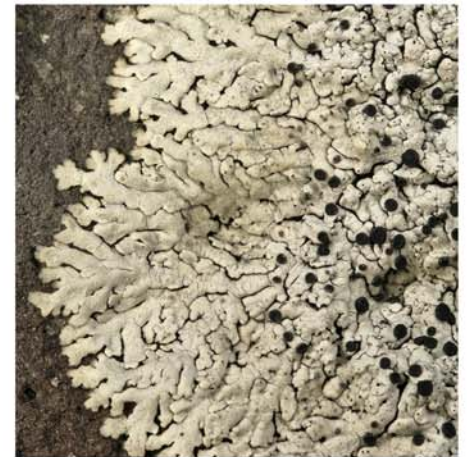
*Pyrgillus javanicus* Nyl.



*Pyrrhospora quereia* (Dicks.) Körb.



*Pyxine cocoës* (Sw.) Nyl.



*Pyxine petricola* Nyl.



*Ramalina anceps* Nyl.



*Ramalina aspera* Räsänen



*Ramalina camptospora* Nyl.



*Ramalina complanata* Ach.



*Ramalina darwiniana* var. *darwiniana*  
Aptroot & Bungartz



*Ramalina darwiniana* var. *darwiniana*  
Aptroot & Bungartz



*Ramalina fragilis* Aptroot & Bungartz



*Ramalina furcellangulida* Aptroot



*Ramalina montagnei* De Not.



*Ramalina peruviana* Ach.



*Ramalina polyforma* Aptroot



*Ramalina polyforma* Aptroot



*Ramalina puiggarii* Müll. Arg.



*Ramalina sideriza* Zahlbr.



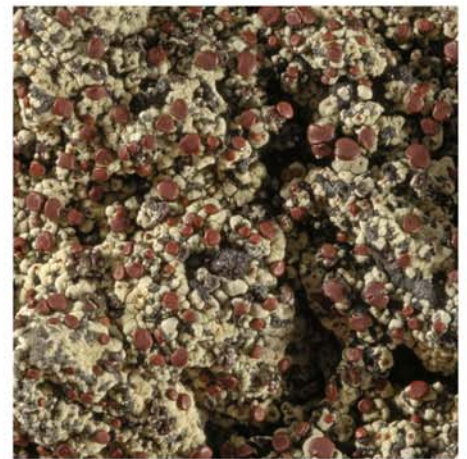
*Ramalina soresdiantha* Nyl.



*Ramalina soresdiosa* (de Lesd.) Landrón



*Ramalina usnea* (L.) R. Howe



*Ramboldia heterocarpa* (Fée) Kalb, Lumbsch & Elix



*Ramonia valenzueliana* (Mont.) Stizenb.



*Redonographa galapagoensis* Bungartz & Lücking



*Redonographa saxorum* (Egea & Torrente) Lücking & Tehler



*Rinodina lepida* (Nyl.) Müll. Arg.



*Roccella albida* Tehler



*Roccella gracilis* Bory



*Roccella gracilis* Bory



*Roccella margaritifera* B. Werner & Follmann



*Roccella nigerrima* (Darb.) Follmann



*Roccella nigerrima* (Darb.) Follmann



*Roccellographa circumscripta* (Taylor) Ertz & Tehler



*Sarcographa ramificans* (Kremp.) Staiger



*Sarcographa tricola* (Ach.) Müll. Arg.



*Schismatomma spierii* Aptroot & Sparrius



*Schistoporon tenue* Stirt.



*Schistoporon variabile* Tibell



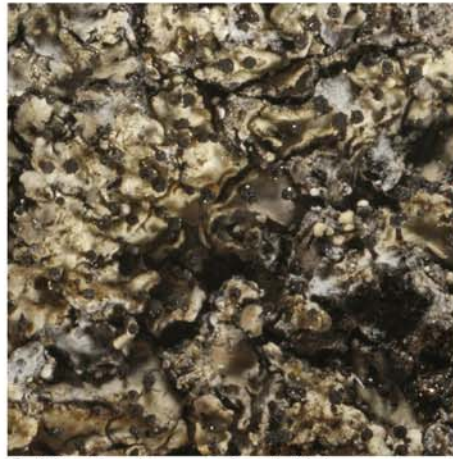
*Sclerophyton murex* Egea & Torrente ex Sparrius



*Sclerophyton vertex* Sparrius



*Sigridea leptothallina* (Malme) Tehler



*Sphinctrina leucopoda* s.l. Nyl.



*Sphinctrina tubiformis* A. Massal.



*Staurothele lecideoides* de Lesd.



*Stereocaulon azulense*



*Stereocaulon weberi*



*Stereocaulon weberi*



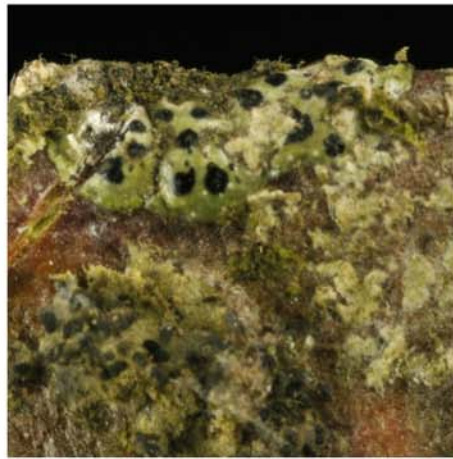
*Sticta dichotoma* Delise



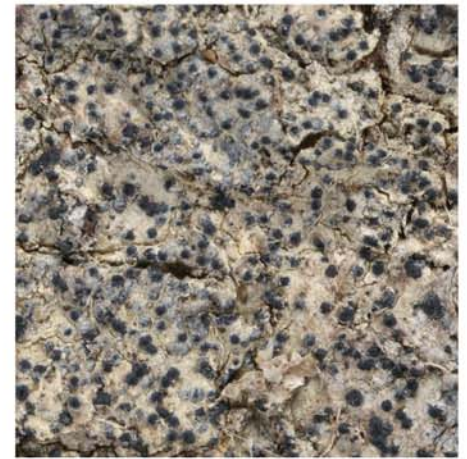
*Sticta weigeli* (Ach.) Vain.



*Strigula cf. obtecta* (Vain.) R. C. Harris



*Strigula microspora* Lücking



*Strigula phaea* (Ach.) R.C. Harris



*Strigula smaragdula* Fr.



*Strigula* sp.



*Strigula viridiseda* (Nyl.) R.C. Harris



*Synalissa mattogrossensis* (Malme)  
Henssen



*Syncesia farinacea* (Fée) Tehler



*Syncesia leprobola* Nyl. ex Tehler





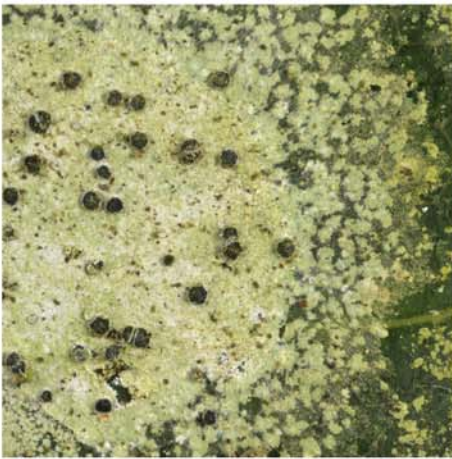
*Syncesia leprobola* Nyl. ex Tehler



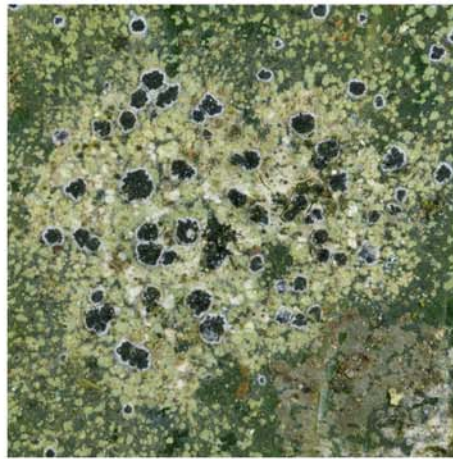
*Syncesia psaroleuca* (Nyl.) Tehler



*Syncesia psaroleuca* (Nyl.) Tehler



*Tapellaria epiphylla* (Müll. Arg.) R. Sant.



*Tapellaria nana* (Fée) R. Sant.



*Teloschistes chrysophthalmus* (L.) Th. Fr.



*Teloschistes flavicans* (Sw.) Norman



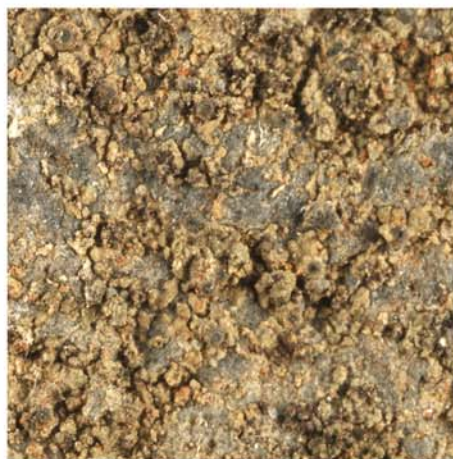
*Tephromela rhizophorae* Kalb



*Thallolella cinnabarinum* (Fée) Staiger



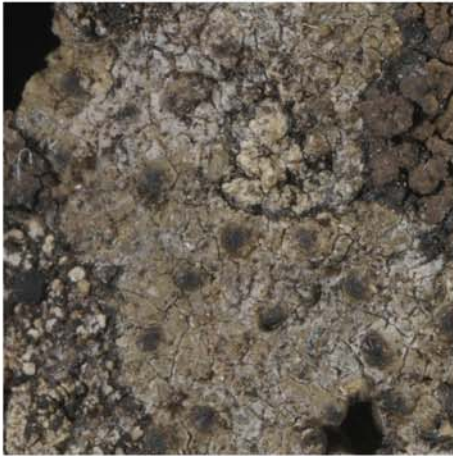
*Thamnolia vermicularis* (Sw.) Ach. ex Schaer.



*Thelenella inductula* (Nyl.) H. Mayrhofer



*Thelenella muscorum* (Fr.) Vain.



*Thelenella sastreana* (cf. *brasiliensis*)



*Thelopsis isiaca* Stitzenb.



*Thelopsis rubella* Nyl.



*Thelotrema pachysporum* Nyl.



*Trapelia coarctata* (Turner ex Sm.) M. Choisy



*Trichothelium epiphyllum* Müll. Arg.



*Trypethelium aeneum* (Eschw.) Zahlbr.



*Trypethelium eluteriae* Spreng.



*Trypethelium marcidum* (Fée) Müll. Arg.



*Trypethelium nitidiusculum* (Nyl.) R.C. Harris



*Trypethelium ochroleucum* (Eschw.) Nyl.



*Trypethelium tropicum* (Ach.) Müll. Arg.



*Tylophoron cf. protrudens* Nyl.



*Tylophoron galapagoense* Bungartz, Ertz, Diederich & Tibell



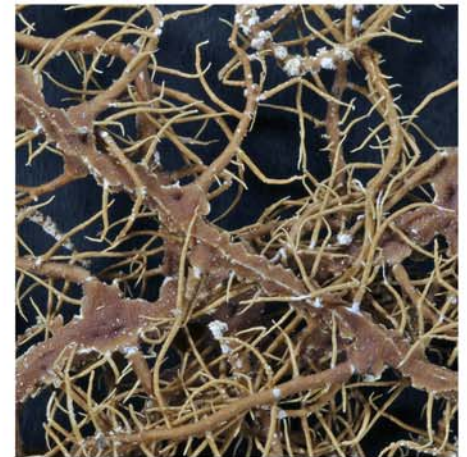
*Tylophoron galapagoense* Bungartz, Ertz, Diederich & Tibell



*Tylophoron hibernicum* (D. Hawksw., Coppins & P. James) Ertz, Diederich, Bungartz & Tibell



*Tylophoron moderatum* Nyl.



*Usnea angulata* Ach.



*Usnea baileyi* (Stirt.) Zahlbr.



*Usnea cf. bornmuelleri* J. Steiner



*Usnea cirrosa* (hirto-cirrosa) Motyka



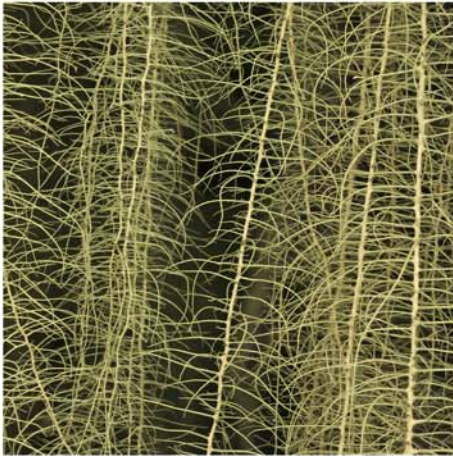
*Usnea cladocarpa*



*Usnea columbiana* Motyka



*Usnea cornuta* Körb.



*Usnea mexicana* Vain.



*Usnea rubicunda* Stirt.



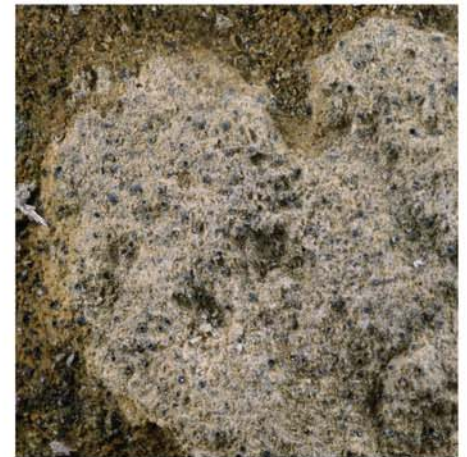
*Usnea* sp. 30



*Usnea subflammea* P. Clerc



*Usnea subscabrosa* Nyl. ex Motyka



*Verrucaria xyloxena* Norman



*Xanthomendoza weberi*



*Xanthoparmelia congensis*



*Xanthoparmelia subramigera*

## Glosario

**Amiloide:** reacción química en color azul o violeta con una solución iodada (Lugol, típicamente se aplica 1,5% de I en 10% de IK = Lugol, o bien más ligera sólo 0,5-1% de I). Una fuerte reacción rojo sin aplicación previa de hidrato de potasio (K) se llama hemi-amiloide. Una reacción azul después de la aplicación de hidrato de potasio (K) se llama holo-amiloide.

**Anfitecio:** (= margen o exípulo talino) borde que rodea al disco de algunos apotecios (lecanorino, zeorino) y que contiene células del mismo fotobionte que el talo.

**Apotecio:** Ascoma (ascocarpo) en forma de disco o copa. El himenio, cuando está maduro, queda expuesto al exterior en forma ± extensa y va rodeado por un borde (= exípulo, margen) de distintos tipos (margen propio y/o talino).

**Areolado:** se refiere a un talo crustáceos claramente dividido en areolas por medio de fisuras completas ± anchas que lo confieren un aspecto mosaico.

**Ascoma:** distintos tipos de estructuras de reproducción que producen ascos, ascósporas y paráfisis.

**Ascomicete:** grupo de hongos caracterizados por formar esporas dentro de unas estructuras microscópicas en forma de saco, llamada ascas.

**Ascos:** estructura en forma de saco que contienen ascósporas endógenas de origen sexual, es propia de los *Ascomycetes*.

**Ascóspora:** meióspora originada endógenamente en un asco y que reproduce al micobionte. Hay muchos tipos: simples, septadas, murales, incoloras, coloreadas, con o sin halo.

**Basidiocarpo:** Cuerpo fructífero de los basidiomicetes que produce basidios y basidiosporas; típicamente en una forma de sombrero o repisa.

**Basidiomicete:** (= *Basidiomycete*) un grupo de hongos relacionados filogenéticamente que desarrollan basidios como consecuencia de la reproducción sexual.

**Basidiósporas:** meióspora originada exógenamente en un basidio.

**Biatornino:** apotecio lecideino en el que las hifas del excípulo propio no están carbonizadas, son flexibles, de colores claros; el margen puede llegar a desaparecer en la madurez si el apotecio se hace muy convexo.

**Biótico:** todo lo viviente; una asociación biótica que comprende los organismos (ej. plantas, hongos, bacterias, algas, animales, etc.) presentes en un área determinada.

**C:** abreviatura de lejía comercial sin diluir. Da coloraciones rosas, rojas, naranjas o verdes, pero en ocasiones la reacción es fugaz y se debe observar cuidadosamente; sirve para detectar, entre otros, los ácidos lecanórico y girofórico, cuando da rojo o rosa fugaz. En muchos casos es necesario el pretratamiento con K, KC, para obtener la reacción coloreada.

**Cámara ocular:** protrusión del ascoplasma que contiene las esporas hacia el tholus del aparato apical de los ascos. Suele tener formas variadas, desde redondeado (dactiliforme) hasta atenuado y puede distinguirse fácilmente añadiendo Lugol o azul de lactofenol.

**Célula eucariota:** el término eucariota hace referencia a núcleo verdadero (del griego: 'eu' = buen, 'karyon = núcleo). Los organismos eucariotas incluyen algas, protozoos, hongos, plantas vasculares, y animales.

**Célula procariota:** la palabra procariota viene del griego ('pro' = previo a, 'karyon = núcleo) y significa pre-núcleo. Los miembros del mundo procariota son las bacterias que constituyen un grupo heterogéneo de organismos unicelulares muy pequeños, una típica célula procariota está constituida por las siguientes estructuras principales: pared celular, membrana citoplasmática, ribosomas, inclusiones y nucleóide.

**Cianobacteria:** organismo procariota del reino de las eubacterias que son fotosintetizadoras, división *Cyanophyta*, clase *Cyanophyceae*. Conocidas como algas verde-azuladas.

**Cífela:** con excavaciones en la cara inferior del talo de un líquen, con anatomía compleja y recubiertas por un córtex especial en forma de anillo.

**Cilios:** prolongaciones fúngicas, que se sitúan en la cara superior o en el margen de los talos.

**Conidiógeno:** célula fúngica apical, monocariótica, de la que se originan conidios en los ascomicetes.

**Conidioma:** estructura formada por varias hifas que contiene las células conidiógenas y los conidios, puede tener formas variadas.

**Conidios:** (=conidiósporas) esporas de origen asexual formadas en células conidiógenas.

**Córtex:** Es la capa más externa de los talos heterómeros (y el margen talino de los apotecios lecanorinos), de anatomía y grosor variables, constituida por plecténquimas de distintos tipos que le confieren cierta consistencia o coherencia y protege a la capa de fotobiontes de la agresión físico-química del medio atmosférico. Se puede acumular algunas sustancias, entre ellas como ácido úsnico, el ácido rizocárpico, la atranorina o la

parietina, relacionadas con la filtración de ciertas longitudes de onda de la luz y protección del aparato fotosintético del fotobionte. También puede ser la zona de expulsión de detritus orgánico del talo. En algunas especies es la capa que da consistencia a los talos, ejemplo: *Ramalina*.

**Corticado:** que tiene córtex o en la zona más externa.

**Cortícola:** que crece sobre la corteza de plantas leñosas, especialmente las que tienen ritidoma originado por la actividad del felógeno.

**Crustáceos:** tipo de talo de líquenes que se encuentran siempre en estrecho contacto con el sustrato, carecen de córtex inferior o de órganos de ejecución y no se puede separar de él sin destruirlos. Se sujetan al sustrato por medio de médula o de un hipotalo.

**Dimórfico:** (= talo compuesto) talo que tiene dos formas, son talos compuestos por dos partes muy diferentes: una - talo primario-granuloso ó escuamulosa y otra - talo secundario-fruticulosa con elementos perpendiculares al sustrato.

**Endémico:** nativo y restringido a un área ó región particular.

**Epitecio:** en el sentido amplio, una capa por encima de los ascos, rica en pigmentos y/o cristales que se diferencia en la parte superior del himenio a consecuencia de la actividad de los ápices de las paráfisis; en el sentido estricto epitecio se refiere solamente a un plecténquima distinto, encima del himenio mientras que el epihimenio no es un tejido separado pero solamente la área arriba del himenio donde los paráfisis son pigmentados.

**Escuamuloso:** (= escuamiforme, escamoso) tipo de talo de líquenes laminares contruidos por escuámulas de formas muy viables.

**Espinulado:** con apéndices similares a fibrillas, estrechos y puntiagudos, algo constreñidos en la base.

**Esporas:** células generativas que producen nuevos individuos sin necesidad de fusionarse (eso se diferencia de los gametos). Pueden ser de origen sexual o asexual. En líquenes, las de origen sexual (ascósporas y basidósporas) se forman tras las meiosis en los ascos o en los basidios; las asexuales se llaman picnosporas o conidias y originan en conidiomas.

**Excípulo propio** (= margen propio, peritecio): pseudotejido fúngico que rodea al himenio de los apotecios, sin fotobiontes, puede tener una anatomía y colores variados.

**Excípulo talino:** tejido fúngico que rodea al excípulo propio y contiene fotobiontes, con una estructura similar al talo (= margen talino, anfitecio). En peritecios se usa el término pirenio.

**Farináceo:** finamente pulverulento, como granos de harina; se aplica a los soledios pero también al aspecto que puede proporcionar a las superficies la cobertura por pruina.

**Filamentoso:** en forma de hilo, pelo o fibra.

**Fiotobionte:** el bionte clorofílico de un líquen, las algas verdes que participan en las simbiosis liquénicas.

**Foliáceos:** tipo de talo de líquenes que tiene forma laminar y ofrecen una estructura más compleja, con una organización dorsiventral y cara inferior diferenciada; parcialmente adherida al sustrato.

**Forófitos:** Planta portadora de los epífitos.

**Fotobionte:** el bionte que fotosintetiza en las simbiosis liquénicas. Puede ser una alga verde multicelular (eucariota) o una cianobacteria (procariota).

**Frecuencia:** el número de veces que se repite un dato (típicamente se mide en porcentaje: %).

**Fruticoso:** tipo de talo de líquenes en forma de ejes más o menos ramificados como pequeños arbustos.

**Hábitat:** lugar natural con sus condiciones ecológicas en el que suele desarrollarse un organismo.

**Hialino:** transparente como el cristal; se usa mucho para incoloro.

**Hifa:** filamento microscópico pluricelular del micobionte; puede ser muy variada en formas, colores y consistencias.

**Hifóforo:** conidioma peltado-umbelada, prominente, en la cara superior de los talos, que lleva en el ápice un conjunto de hifas (diahifas) delgadas y flexibles, cintadas.

**Himeno:** (= tecio) el ascoma está compuesto de hifas haploides que rodean la base del ascogonio y de hifas ascógenas dicarióticas; de éstas se originan los ascos que junto con las paráfisis estériles (hamatecio) configuran el himenio.

**Hipotalo** :( $\pm$  protalo)

**Hipotecio** (= excípulo basal): pseudotejido fúngico entre las base del himenio por debajo del subhimenio y el excípulo, puede expandirse en forma de concavidad o ser cónica se ve bien en sección media; hialino hasta carbonáceo, es parte y a veces difícil de distinguir del excípulo propio lateral (= peritecio); puede contener cristales y dar reacciones coloreadas con distintos reactivos.



**Homómero:** tipo de talo no estratificado, en que el micobionte y los fotobiontes están uniformemente distribuidos y donde los fotobiontes son siempre cianobacterias (verde-azulados); a veces con un córtex, o todo el talo celular.

**Imbricado:** escuámulas, lóbulos, etc., que están superpuestos unos a otros, como las tejas en un tejado.

**Introducida:** plantas exóticas que llegaron a las islas con ayuda del hombre.

**Invasor:** son aquellas plantas indeseables que invaden zonas.

**Isidios:** proyecciones de la superficie del talo, revestidas de córtex e incluyendo las fotobiontes (algas o cianobacterias). Su color puede ser igual o diferente del resto del talo y su forma es muy variable: esférica, verrugosa, claviforme, escumiforme. Se desprenden fácilmente del talo cuando está seco, actuando como elementos de propagación vegetativa y posiblemente juegan un papel en el intercambio gaseoso con la atmósfera.

**K (KOH):** (solución 10% de hidróxido de potasio en agua). La fórmula es 10 g de KOH y 100 ml de agua destilada. Suele producir reacciones coloreadas con distintas sustancias líquénicas, desde amarillo hasta el rojo o pardo.

**Labriforme:** en forma de labios, se usa para soralios situados en los extremos o en los márgenes de lóbulos que se originan en la superficie inferior pero se recurvan hacia la superior, es frecuente que se abran.

**Lámina:** una estructura fina y plana; muy frecuentemente se usa para la superficie superior de los talos.

**Lecanorino** (= exípulo talino, margen talino, anfitocio, zeorino): apotecio con reborde originado por el talo, de la misma estructura del talo, es decir frecuentemente (pero no siempre) con córtex y capa de fotobionte, suele tener el mismo color textura del talo.

**Lecideino:** apotecio sin reborde talino, solo con margen o exípulo propio originado por las hifas del ascoma, siempre con la pared oscura o carbonácea (cf. con biatorino).

**Leprarioide:** talo que tiene la superficie, pulverulenta granuloso-pulverulenta, son córtex, laxa, transformada en soralios.

**Lirela:** un tipo de ascoma con un disco largo y estrecho, en contacto con el exterior, ovalado o linear, ramificado en forma estrellada (aspecto de escritura egipcia). Se puede interpretar como un apotecio o como un peritocio cuando el excípulo es muy urceolazo.

**Macroliquen:** liquen fácilmente observable por tener un tamaño grande; suelen ser biotipos foliáceos, fruticulosos, placodioides o escamulosos.

**Macula:** con manchas blanca y pequeña de la cara superior del talo.

**Médula:** es una capa fúngica que suele ocupar el mayor volumen en el talo. Esta constituida generalmente por un conjunto de hifas laxamente entremezcladas (aracnoide), de aspecto algonodoso y con espacios que permiten la aireación del talo.

**Metabolitos secundarios:** sustancias liquénicas producido por el metabolismo secundario.

**Micobionte:** cada uno de los hongos simbioses que participan en la formación de los talos liquénicos.

**Microlíquén:** líquenes pequeños, de biotipos crustáceos.

**Nativa:** Son aquellas especies originarias de la zona en que habitan, pero que no se encuentran necesariamente en forma exclusiva en ellas.

**Orbicular:** redondo o circular.

**Paráfisis:** hifas especializadas del himenio que son estériles, están unidas a su base, se disponen anticlinalmente y crecen entre los ascos; sirven para mantener erguidos los ascos y dan coherencia al himenio.

**Paratecio:** (= excípulo propio), pseudotejido fúngico que rodea el himenio de los apotecios, sin fotobiontes, puede tener una anatomía y colores variados.

**PD (Steiner's):** reactivo de parafenilendiamina, cristales que se disuelven con unas gotas de etanol, en un frasquito o tubo de cristal, se evapora fácilmente por lo que se puede añadir más etanol al residuo que va quedando, pero hay que preparar cada día porque se oxida. Es muy cancerígeno por lo que debe manipularse con cuidado.

**Peritecio:** ascoma ± globoso, en forma de ampolla, con un cuello largo y estrecho.

**pH:** es el símbolo que utiliza en la química para medir la acidez o alcalinidad de las soluciones (= el logaritmo recíproca de la concentración iónica de hidrogeno).

**Picnidio:** conidioma pequeño, globoso, ampuliforme, en el interior del cual se desarrollan los conidios por diversos procesos de conidiogénesis.

**Pionero:** El primer trabajo que se realiza de algo específico de líquenes en la Isla Santa Cruz.

**Pirenio:** pared o excípulo de los peritecios.

**Podecio:** talo secundario, fruticoso que deriva de una prolongación del apotecio, el origen del pseudotejido son las hifas propias del apotecio, por ejemplo en el género *Cladonia* (v: pseudopodecio).

**Protalo:** (± hipotalo) estructura fúngica de micelio indiferenciado, las primeras hifas que crean al rededor de un talo liquénico; a veces usado en el mismo sentido como hipotalo que se refiere a un micelio no liquenizado abajo del talo propio.

**Pseudocífela:** consisten en la interrupción del córtex por la proliferación de hifas medulares, manifestándose como poros.

**Pseudopodecio:** por ejemplo en el género *Stereocaulon* (cf. podecio).

**Pubescente:** cubierto por capa de pelos cortos y suaves en la superficie.

**Rimoso:** tipo de talo de líquenes crustáceos con las fisuras irregulares y superficiales, incompletas.

**Rizina:** órgano apendicular de sujeción que consiste en la agrupación de paquetes de hifas que salen de la cara de los líquenes foliáceos.

Se distinguen dos tipos principales: (1) *biatorino*, con un reborde (excípulo) originado por las hifas del ascoma (margen propio); si el margen propio está carbonizado este tipo se llama *lecideino*; (2) *lecanorino*, con reborde originado por el talo con córtex y capa de fotobiontes (margen talino); por este tipo unos autores también usan *zeorino* si el margen propio es todavía visible dentro del margen talino. El reborde puede estar constituido por dos capas, una interna (paratecio) y otra externa (anfitecio). Las formas son muy diversas: sésiles hasta pedicelados, hasta muy estipitados, como en *Cladonia*, y a veces el himenio se transforma en una masa compuesta por numerosas esporas con restos de las paredes de los ascos (mazedios), típico de los Caliciales. Los alargados y/o ramificados alargados y con excípulo carbonizado son las lirelas.

**Soralios:** área delimitada en que se forman soledios.

**Soredios:** formados por algunos fotobiontes entremezclados y rodeados con filamentos miceliares y tienen pequeñas granulaciones de 25-100 micrómetros. Aparecen agrupados en la superficie del talo dentro áreas llamado soralios, típicamente con aspecto granuloso o pulverulento, pero siempre sin córtex. Los soledios son liberados por interrupciones de la superficie del líquen y sirven para la propagación vegetativa.

**Tholus:** (= tolo), aparato apical del asco, un engrosamiento apical de la capa interna del asco, en los ascos lecanoreanos. Suele ser  $\pm$  amiloide y constar de diversas estructuras que se tiñen  $\pm$  intensamente con Lugol. La taxonomía moderna de los líquenes incluidos en los *Lecanorales* está basada en estas características y su ontogenia de desarrollo. Varía con los tipos definidos que se van indicando.

**Tomento, -oso:** cubierto en la superficie por una capa  $\pm$  densa de pelos rígidos y  $\pm$  largos (v: pubescente), aspecto algodonoso, lanudo o fieltado.

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# CDF Checklist of Galapagos Lichenized Fungi

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**Last updated:** 23 May 2013

## Abstract

This Checklist of Galapagos Lichenized Fungi includes a total of all 785 taxa reported from the Galapagos Islands.

For each name, detailed information is provided: its Galapagos distribution in islands groups or bioregions generated from the specimen records, comments about the taxonomy (especially synonyms), the origin (native and introduced), taxon status (accepted vs. rejected records) and relevant literature references.

## Introduction

This publication lists all species of Galapagos Lichenized Fungi currently known.

This checklist includes all lichen fungi that are currently known to occur in the Galapagos Islands. This list also includes some fungi typically associated with lichens (lichenicolous fungi, i.e., fungi parasitic or parasymbiotic on lichens) or often treated by lichenologists even though they are not lichenized.

Lichens do not represent a taxonomic group, but are a classic example of a symbiosis, i.e., two very different organisms living together to form a new entity.

The outside shape and structure that we notice as a lichen is built by a fungus. Inside, this macroscopic structure hosts microscopic cells of green algae (Chlorophyta) or blue-green photosynthetic bacteria (Cyanobacteria).

The fungi that participate in this symbiosis belong to two taxonomic divisions (or phyla): Basidiomycota & Ascomycota.

## Methods

This checklist of all known Galapagos Lichenized Fungi is automatically generated using the online database of the Charles Darwin Foundation Galapagos Species Checklist.

All CDF Galapagos Species Checklists represent the synthesis of many different records: literature citations, data from previously unpublished reports (grey literature), specimen records of natural history collections located in Galapagos and all over the world. To the best of their knowledge authors of the individual checklists revised all available data. When new information becomes available, the taxonomy of a group changes or new species are discovered, the CDF online database and thus this publication becomes updated.

For many poorly known species groups the higher taxonomic classification still regularly changes according to how our knowledge about species being related changes. In many well known groups the phylogeny is somewhat stable, but to avoid confusion, in particular for groups where taxonomic changes are frequent, all checklists presented here are sorted alphabetical according to genus name and specific epithet. Please refer to the website for the currently accepted taxonomic hierarchy of each group.

Please be aware that the distribution presented here is automatically generated from specimen records and does not always accurately reflect the known distribution for all species.

For marine species, the distribution generally refers to the five main bioregions of the archipelago (Far Northern, Northern, Western, South Eastern and the Elisabeth Bay Bioregion). For the terrestrial species more than 120 islands, islets and small rocks have been aggregated into Islands Groups, thus, for example, the island group "Santa Cruz" includes smaller islands like Santa Fé, Plaza Norte, Plaza Sur, Baltra, Daphne Mayor, Daphne Minor, and others.

IUCN red-list assessments presented here may deviate from the global IUCN list for the following reasons:

- for well known species groups like vascular plants or vertebrates updates proposed to the IUCN are shown instead of the outdated, but currently accepted status;
- for poorly known species groups (e.g., lichenized fungi) a general assessment is currently not possible and the list presented here is a regional red-list list for Galapagos archipelago.

Numbers of the species included in this list are auto-generated. Adding up the number of species in each category will not always equal the total number indicated. Some species have insufficient data to be categorized while others (e.g., category eradicated) will not be included in the total.

## Results

**Names of taxa included in this checklist:** 785 (570 accepted, 5 unidentified taxon, 13 doubtful, 43 preliminary identification, 13 problematic, 8 new to science), 133 rejected.

**Origin of the taxa included:** 1 questionable native, 36 endemic, 553 indigenous, 2 questionable endemic.

1. *Acantholichen pannarioides* P.M. Jørg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Jørgensen, P.M. et al. (1998), Lawrey, J.D. et al. (2009), Lücking, R. et al. (2009), Yáñez, A. et al. (2012).

2. *Acarospora americana* H. Magn.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

**References:** Knudsen, K. et al. (2012).

3. *Acarospora chrysops* (Tuck.) H. Magn.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

fide K. Knudsen (pers. comm.) this taxon was misidentified in Elix & McCarthy (1998) as *A. citrina* and in Weber (1986) as *A. schleicheri*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Weber, W.A. et al. (1986).

4. *Acarospora sparsiuscula* H. Magn.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela.  
**References:** Knudsen, K. et al. (2012).
5. *Acarospora trachyticola* (Müll. Arg.) Hue  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santiago.  
**References:** Knudsen, K. et al. (2012).
6. *Actinoplaca strigulacea* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
7. *Actinoplaca vulgaris* (Müll. Arg.) Vězda & Poelt  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Tricharia vulgaris*, fide Elix & McCarthy (1998); specimen in COLO 193173 (L-40433, det. Vězda): Santa Cruz, on leaves of *Coffea*, Horneman garden, p.p. (with *Aspidothelium scutellarpum* Lücking; originally identified by Vězda as *Aspidothelium fugiens*)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
8. *Aderkomyces papilliferus* (Lücking) Lücking, Sérus. & Vězda  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.
9. *Agonimia opuntiella* (Buschardt & Poelt) Vězda  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Near Threatened.  
**Galapagos Distribution:** Isabela.
10. *Agonimia pacifica* (H. Harada) Diederich  
**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón, Santa Cruz.

11. *Agonimia tristicula* (Nyl.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

12. *Alyxoria ochrocheila* (Nyl.) Ertz & Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Opegrapha ochrocheila* Nyl.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Unknown.

**References:** Ertz, D. et al. (2010).

13. *Alyxoria varia* (Pers.) Ertz & Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Opegrapha varia* Pers.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Unknown.

**References:** Ertz, D. et al. (2010).

14. *Angiactis spinicola* Aptroot & Sparrius

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: ECUADOR. Galapagos: Santa Cruz Island, coastal cliffs E of Puerto Ayora near Charles Darwin Research Station, on spines of *Scutia spicata*, 0u449450S, 90u179390W, 20 m alt., 29 May 2005, Aptroot 63413 (CDS 30168, holotype; ABL, BM, isotypes).

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Isabela, San Cristóbal, Santa Cruz.

**References:** Aptroot, A. et al. (2007).

15. *Anisomeridium albisedum* (Nyl.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón, Santa Cruz.

16. *Anisomeridium biforme* (Borrer) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.



**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

17. *Anisomeridium leptospermum* (Zahlbr.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

18. *Anisomeridium polypori* (Ellis & Everh.) M.E. Barr

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

19. *Anisomeridium subprostans* (Nyl.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santiago.

20. *Anisomeridium tamarindi* (Fée) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

21. *Anisomeridium tuckerae* R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Original spelling as *A. tuckeri* is incorrect; species named after S. C. Tucker, correct spelling therefore: *A. tuckerae*; Syn.: *Ditremis tuckerae*, fide Elix & McCarthy (1998).

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998).

22. *Arthonia antillarum* (Fée) Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

23. *Arthonia cinnabarina* (DC.) Wallr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Arthonia tumidula*, fide Elix & McCarthy (1998), *Arthonia gregaria*, fide Weber (1986): 488

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

24. *Arthonia follmanniana* Diederich

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santiago.

**References:** Diederich, P. et al. (1995), Elix, J.A. et al. (1998).

25. *Arthonia platygraphidea* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Fernandina.

26. *Arthonia sanguinea* (Willey) Zahlbr.

**Taxon status:** Identification not yet confirmed.

F. Bungartz: material needs verification

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela.

27. *Arthonia speciosa* (Müll. Arg.) Grube

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Santa Cruz.

**References:** Grube, M. et al. (2007).

28. *Arthopyrenia cerasi* (Schrad.) A. Massal.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

29. *Arthopyrenia cinchonae* (Ach.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Specimen in COLO: Santa Cruz, on Scalesia, Bella Vista, Weber L-40225, det. Aptroot, 1991

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

30. *Arthothelium galapagoense* Huneck & Follmann  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).
31. *Aspidothelium cinerascens* Vain.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.
32. *Aspidothelium scutellarpum* Lücking  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
F. Bungartz: in Weber (1986) erroneously cited as *Aspidophyllum fugiens*; material Weber 285 (L-40433). The material was originally determined by Vezda, but with publication of Lücking (2008) the species concept has changed; the Galapagos specimens has perithecia with disk-like, dentate expansion and not setae or hairs and thus belongs to *A. scutellarpum*.  
**Origin:** No Data.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Elix, J.A. et al. (1998), Lücking, R. et al. (2008), Weber, W.A. et al. (1986).
33. *Asterothyrium rotuliforme* (Müll. Arg.) Sérus. & J.R. De Sloover  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
34. *Astrothelium variolosum* (Ach.) Müll. Arg.  
**Taxon status:** Taxonomic status unresolved or unrevised.  
F. Bungartz & R. Miranda: According to Harris (1995) *Trypethelium ochroleucum* and *Astrothelium variolosum* are identical in all characters but their stromata formation; *Trypethelium nitidiusculum* is identical to *Trypethelium ochroleucum* in all characters but the presence of lichexanthone. It is possible that all three taxa refer to one variable species only.  
**Origin:** No Data.  
**Galapagos Distribution:** Isabela, Pinta.  
**References:** Harris, R.C. et al. (1995), Kirk, P. (ed.) et al. (2010).
35. *Aulaxina opegraphina* Fée  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

36. *Bacidia heterochroa* (Müll. Arg.) Zahlbr.

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santa Cruz.

37. *Bacidia insularis* Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

38. *Bacidia millegrana* (Taylor) Zahlbr.

**Taxon status:** Identification not yet confirmed.

Lich. Exs. COLO 121; A. Aptroot doubts this determination (pers. comm.)

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981).

39. *Bacidia polychroa* (Th. Fr.) Körb.

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santa Cruz.

40. *Bacidia rubella* (Hoffm.) A. Massal.

**Taxon status:** Identification not yet confirmed.

specimen in COLO (L-41125); A. Aptroot doubts this determination (pers. comm.)

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

41. *Bacidina apiahica* (Müll. Arg.) Vězda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Bacidia apiahica*, fide A. Aptroot (pers. comm.), *Woessia apiahica*, fide Index Fungorum

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

42. *Bacidina chlorotricula* (Nyl.) Vězda & Poelt

**Taxon status:** Identification not yet confirmed.

Syn.: *Bacidia chlorotricula*

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

43. *Bacidina delicata* (Larbal. ex Leight.) V. Wirth & Vozzda

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santa Cruz.

44. *Bacidina pallidocarnea* (Müll. Arg.) Vozzda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

45. *Bactrospora acicularis* (C.W. Dodge) Egea & Torrente

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, San Cristóbal, Santa Cruz, Santa Fé.

**References:** Aptroot, A. et al. (2008).

46. *Bactrospora denticulata* (Vain.) Egea & Torrente

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2008).

47. *Bactrospora myriadea* (Fée) Egea & Torrente

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Floreana, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2008).

48. *Bathelium degenerans* (Vain.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

49. *Bathelium feei* (C.F.W. Meissn.) Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Bathelium carolinianum*.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Santa Cruz.

50. *Biatoropsis usnearum* Räsänen

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santiago.

51. *Brigantiaea leucoxantha (sorediate form)* (Spreng.) R. Sant. & Hafellner

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: the Galapagos material is densely diffusely sorediate across the entire thallus and therefore not *B. leucoxantha* s.str.; the specimen collected by Pike (COLO L-55433) examined by J. Hafellner 1983 identified as *B. leucoxantha* is also densely sorediate.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

52. *Brigantiaea leucoxantha s.str.* (Spreng.) R. Sant. & Hafellner

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: most Galapagos material is densely sorediate and therefore does not belong to *B. leucoxantha* s.str. However, some material not forming soredia has been found, those esorediate specimens may not be identical with the sorediate forms because they are known from much drier habitats only.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz.

53. *Buellia coccinea s.l.* (Fée) Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

54. *Buellia erubescens* Arnold

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Unknown.

55. *Buellia galapagona* W.A. Weber

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Roth, K. et al. (1978), Weber, W.A. et al. (1971), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

56. *Buellia halonia* (Ach.) Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Santa Cruz, Santiago.

57. *Buellia lauricassiae* (Fée) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

58. *Buellia mamillana s.l.* (Tuck.) W.A. Weber

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Rinodina mamillana*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Darwin, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

59. *Buellia oidalea* (Nyl.) Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, San Cristóbal.

60. *Buellia rufofuscescens* Stizenb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

61. *Buellia spuria* (Schaer.) Anzi

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Española, Isabela, Santa Cruz, Santa Fé.

62. *Buellia stellulata* (Taylor) Mudd

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Española, Floreana, Isabela, Santa Cruz, Santiago.

63. *Buellia straminea* Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Buellia xanthinula* auct. non (Müll. Arg.) Malme, fide Elix & McCarthy (1998); in Dodge (1936) as *Buellia xanthinula*

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

64. *Buellia subdisciformis* agg. (Leight.) Vain.

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Isabela.

65. *Buellia sulphurica* Bungartz & Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: ECUADOR. Galápagos: Isabela Island, Volcán Alcedo, upper NNW-exposed slope inside the crater, 0°27'S, 91°7'W, 1055 m, open vegetation with *Adiantum concinnum* and scattered shrubs of *Tournefortia rufosericea* among basalt blocks in the vicinity of the sulfur vents, on basalt, March 2006, Aptroot 64881 (holotype CDS-31458, isotype ABL).

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

**References:** Lumbsch, H.T. et al. (2010).

66. *Buellia trachyspora* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

67. *Bulbothrix bulbillosa* Benatti, Spielmann & Bungartz ined.

**Taxon status:** Unpublished name (Nomen nudum).

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Floreana, Isabela, San Cristóbal.

68. *Bulbothrix laevigatula* (Nyl.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmelia laevigatula*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.



**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

69. *Bulbothrix lyngei* Benatti & Marcelli

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

70. *Bulbothrix scortella* (Nyl.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: only one specimen (Aptroot 65313) has a brown lower side throughout.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

71. *Bulbothrix subdissecta* (Nyl.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

72. *Byssoloma discordans* (Vain.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

73. *Byssoloma leucoblepharum* (Nyl.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

74. *Byssoloma subdiscordans* (Nyl.) P. James

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Byssoloma rotuliforme*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

75. *Byssoloma tricholomum* (Mont.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

searched for specimen in COLO, but not found: COLO (L-63764), coll.: Lanier, in packet with Tapellaria epiphylla, det.: Vezda

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

76. *Calicium robustellum* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

77. *Calopadia bonitensis* Cáceres & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

78. *Calopadia cinereopruinosa* Bungartz & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type:—ECUADOR. Galápagos: Isla San Cristóbal, area W of Cerro Pelado on the way to El Ripioso, 0°52'S, 89°28'W, 400 m, transition zone, open Psidium guajava shrubland with Macraea laricifolia and dominant annual herb Malachra capitata, on bark and wood, dead twigs of Psidium guajava, sunny, wind- and rain-exposed, August 2008, Bungartz 8489 (holotype CDS-41135).

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

**References:** Lumbsch, H.T. et al. (2010).

79. *Calopadia editae* Vezda ex Chaves & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: Calopadia pruinosa Lücking & Chavez nom. nud.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Santa Cruz, Santiago.

**References:** Lumbsch, H.T. et al. (2010).

80. *Calopadia foliicola* (Fée) Vezda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: Lopadium foliicola, fide Weber (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998).

81. *Calopadia fusca* (Müll. Arg.) Vozda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Lopadium fuscum*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998).

82. *Calopadia perpallida* (Nyl.) Vozda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

83. *Calopadia puiggarii* (Müll. Arg.) Vozda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Lopadium puiggarii*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998).

84. *Calopadia subcoerulescens* (Zahlbr.) Vozda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, Santa Cruz, Santiago.

85. *Caloplaca aphanotripta* (Nyl.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

86. *Caloplaca arenaria agg.* (Pers.) Müll. Arg.

**Taxon status:** Identification not yet confirmed.

F. Bungartz & U. Søchting: specimens belong to at least one undescribed, possible several species

**Origin:** No Data.

**Galapagos Distribution:** Pinta, San Cristóbal, Santa Cruz, Santiago.

87. *Caloplaca brouardii* (de Lesd.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

fide A. Aptroot: *Caloplaca brouardii*

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

88. *Caloplaca camptidia* (Tuck.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

89. *Caloplaca cf. sonora* Wetmore

**Taxon status:** Identification not yet confirmed.

F. Bungartz & U. Søchting: not the correct name; together with specimens preliminary identified as *C. arenaria* agg. this species belong to at least one undescribed, possible several species

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Pinzón, Santa Cruz, Santiago.

90. *Caloplaca chlorina* (Flot.) Sandst.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón, San Cristóbal, Santa Cruz.

91. *Caloplaca chrysodeta* (Vain. ex Räsänen) Dombrova

**Taxon status:** Accepted name; taxon occurs in Galapagos.

U. Søchting: No molecular data are available, but the morphology and secondary chemistry conform with *C. chrysodeta*, which is recorded as the only leprose *Caloplaca* from the Sonoran Desert.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Unknown.

92. *Caloplaca cupulifera* (Vain.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

93. *Caloplaca diplacia* (Ach.) Riddle

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

94. *Caloplaca epiphora* (Taylor) C.W. Dodge  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.
95. *Caloplaca flavovirescens s.l.* (Wulfen) Dalla Torre & Sarnth.  
**Taxon status:** Identification not yet confirmed.  
F. Bungartz & U. Søchting: the Galapagos specimens belong to an undescribed species in the *Caloplaca flavovirescens*-Group  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz, Santiago.
96. *Caloplaca floridana* (Tuck.) S.C. Tucker  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Placodium floridanum*; specimen in COLO (56167), coll.: Pike  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
97. *Caloplaca furfuracea* H. Magn.  
**Taxon status:** Identification not yet confirmed.  
F. Bungartz: Superficially similar to *C. wrightii*, but with different chemistry.  
**Origin:** No Data.  
**Galapagos Distribution:** Isabela.
98. *Caloplaca isidiosa* (Vain.) Zahlbr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Darwin, Española, Floreana, Genovesa, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
99. *Caloplaca phyllidizans* Wetmore  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Santiago.
100. *Caloplaca sideritis* (Tuck.) Zahlbr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz.

101. *Caloplaca squamosa* (B. de Lesd.) Zahlbr. s.l.

**Taxon status:** Identification not yet confirmed.

F. Bungartz & U. Søchting: taxonomically problematic group of species including, commonly called *C. subsoluta* or *C. modesta*, the Galapagos specimens probably several new species

**Origin:** No Data.

**Galapagos Distribution:** Isabela, San Cristóbal, Santiago.

102. *Caloplaca subsoluta* (Nyl.) Zahlbr.

**Taxon status:** Identification not yet confirmed.

Syn.: *Caloplaca modesta*, fide F. Bungartz annotations, 2008; F. Bungartz & U. Søchting: taxonomically problematic group of species including, commonly called *C. subsoluta* or *C. modesta*, the Galapagos specimens probably several new species

**Origin:** No Data.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

103. *Caloplaca wrightii* (Willey) Fink

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

104. *Candelaria pacifica* M. Westb. & Arup

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: first published as nomen nudum by M. Westberg in Nash et al. (2002), then validated in M. Westb. & Arup, *Bibl. Lich.* 106: 358 (2011).

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela.

**References:** Nash III, T.H. et al. (2002), Westberg, M. et al. (2011).

105. *Candelariella corallizoides* Westberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

106. *Canoparmelia caroliniana* (Nyl.) Elix & Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmelia caroliniana*, fide Elix (1989), *Pseudoparmelia caroliniana*

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998).

107. *Canoparmelia raunkiaeri* (Vain.) Elix & Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
108. *Canoparmelia texana* (Tuck.) Elix & Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.
109. *Celothelium dominicanum* (Vain.) M.B. Aguirre  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
F. Bungartz & R. Miranda: previously misidentified as *C. aciculiferum*.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.
110. *Chaenotheca chloroxantha* Tibell  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, San Cristóbal.
111. *Chaenothecopsis savonica s.l.* (Räsänen) Tibell  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.
112. *Chiodecton malmei* G. Thor  
**Taxon status:** Identification not yet confirmed.  
F. Bungartz: very similar, but spores of different size  
**Origin:** No Data.  
**Galapagos Distribution:** Santiago.
113. *Chrysothrix aff. occidentalis* Elix & Kantivalis  
**Taxon status:** Taxonomic status unresolved or unrevised.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española, Floreana, Isabela, San Cristóbal, Santiago.

114. *Chrysothrix xanthina* (Vain.) Kalb  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
In Weber (1986) as *Chrysothrix candelaris*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.  
**References:** Kalb, K. et al. (2001).
115. *Cladia aggregata* (Sw.) Nyl.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Vulnerable.  
**Galapagos Distribution:** Isabela, Santa Cruz.  
**References:** Ahti, T. et al. (2000), Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).
116. *Cladonia aff. ramulosa* (With.) J.R. Laundon  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Cladonia adpersa*, fide Ahti (2000), *Cladonia pityrea*, fide Elix & McCarthy (1998)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998).
117. *Cladonia arbuscula ssp. boliviana* Ahti  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Cladonia arbuscula ssp. boliviana*; specimens in H and LSU: Isabela, Volcán Alcedo, 1970, Prichard s.n.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Critically Endangered.  
**Galapagos Distribution:** Isabela, Santa Cruz.  
**References:** Ahti, T. et al. (2000).
118. *Cladonia arcuata* Ahti  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Cladonia arcuata*; in Weber (1986) as *Cladonia sandstedei*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Vulnerable.  
**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz.  
**References:** Ahti, T. et al. (2000).
119. *Cladonia cartilaginea* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
fide T. Ahti annotations 2010 (new to Galapagos): CDS 33156  
**Origin:** Native, Indigenous.



**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

120. *Cladonia ceratophylla* (Sw.) Spreng.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Ahti, T. et al. (2000), Dodge, C.W. et al. (1935), Elix, J.A. et al. (1998), Stewart, A. et al. (1912), Svenson, H.K. et al. (1935), Weber, W.A. et al. (1981), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

121. *Cladonia chlorophaea* (Flörke ex Sommerf.) Spreng.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Cladonia balfourii*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Weber, W.A. et al. (1981).

122. *Cladonia confusa f. bicolor* (Müll. Arg.) Ahti

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Cladonia polia*, fide A. Aptroot (pers. comm.), *Cladonia confusa f. bicolor*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

**References:** Ahti, T. et al. (2000).

123. *Cladonia confusa f. confusa* (R. Sant.) Follmann & Ahti

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Cladonia galapagosensis* Ahti, fide Ahti (2000), *Cladonia confusa f. confusa*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Fernandina, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Ahti, T. et al. (2000).

124. *Cladonia corniculata* Ahti & Kashiwadani

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

**References:** Ahti, T. et al. (2000), Elix, J.A. et al. (1998).

125. *Cladonia corymbites* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Santa Cruz.  
**References:** Ahti, T. et al. (2000).

126. *Cladonia corymbosula* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
fide annotations T. Ahti, 2010 (new to Galapagos, new records from the Venezuelan Andes): CDS 31848  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

127. *Cladonia dactylota* Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
In Weber (1986) as *Cladonia subcariosa*, fide A. Aptroot (pers. comm.)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

128. *Cladonia didyma* (Fée) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Ahti, T. et al. (2000), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

129. *Cladonia grayi* G. Merr. ex Sandst.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.

130. *Cladonia macilenta* var. *bacillaris* (Genth) Schaer.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
fide T. Ahti annotations 2010: CDS 27818; first reported by Weber (1986) as *C. macilenta* ssp. *theiophila*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).

131. *Cladonia nana* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, Santa Cruz, Santiago.

**References:** Ahti, T. et al. (2000).

132. *Cladonia polyscypha* Ahti & L. Xavier

**Taxon status:** Accepted name; taxon occurs in Galapagos.

fide annotations T. Ahti, 2010 (new to Galapagos, range poorly known): CDS 31086

**Origin:** Not In Galapagos, Not In Galapagos.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, Santa Cruz, Santiago.

133. *Cladonia pulverulenta* (L. Scriba) Ahti

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

134. *Cladonia pyxidata* (L.) Hoffm.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

fide annotations T. Ahti, 2010 (new to Galapagos, recently found in continental Ecuador): CDS 31422

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santiago.

135. *Cladonia scholanderi* Abbayes

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Cladonia sphaclata*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Ahti, T. et al. (2000).

136. *Cladonia sphaclata* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Not In Galapagos, Not In Galapagos.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

137. *Cladonia strepsilis* (Ach.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

138. *Cladonia subradiata* (Vain.) Sandst.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Cladonia subulata*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Ahti, T. et al. (2000), Elix, J.A. et al. (1998).

139. *Cladonia subsquamosa* Kremp.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz.

**References:** Weber, W.A. et al. (1986).

140. *Cladosporium arthoniae* M.S. Christ. & D. Hawksw.

**Taxon status:** Identification not yet confirmed.

Index Fungorum: anamorphic *Davidiella*

**Origin:** No Data.

**Galapagos Distribution:** Santiago.

**References:** Kirk, P. (ed.) et al. (2010).

141. *Coccocarpia delicatula* Bungartz, Ziemmeck & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: ECUADOR. Galápagos: Isla San Cristóbal, area W of Cerro Pelado on the way to El Ripioso, 0°52'S, 89°28'W, 400 m, transition zone, open *Psidium guajava* shrubland with *Macraea laricifolia* and dominant annual herb *Malachra capitata*, on bark and wood, dead twigs of *Psidium guajava*, sunny, wind- and rain-exposed, August 2008, Bungartz 8496 (holotype CDS-41142).

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

**References:** Lumbsch, H.T. et al. (2010).

142. *Coccocarpia domingensis* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Pinta, San Cristóbal, Santa Cruz.

143. *Coccocarpia erythroxyli* (Spreng.) Swinscow & Krog

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Pannaria molybdaea*, fide Weber (1986) & Elix & McCarthy (1998), *Coccocarpia pellita* var. *parmelioides*, fide Elix & McCarthy (1998); 2 specimens in COLO: 40290, Santa Cruz, Stewart, 1912, det. Dodge 1935 & Santiago, Pike 2718, det. Arvidsson

**Origin:** Native, Indigenous.

**IUCN Red List:** Regionally Extinct.

**Galapagos Distribution:** Floreana, Santa Cruz, Santiago.

**References:** Dodge, C.W. et al. (1935), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

144. *Coccocarpia filiformis* Arv.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Santa Cruz.

145. *Coccocarpia palmicola* (Spreng.) Arv. & D.J. Galloway

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Marchena, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

146. *Coccocarpia pellita* (Ach.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Svenson, H.K. et al. (1935).

147. *Coccocarpia prostrata* Lücking, Aptroot & Sipman

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

148. *Coenogonium aff. luteolum* (Kalb) Kalb & Lücking

**Taxon status:** Unpublished name (Nomen nudum).

F. Bungartz: most specimens of *C. strigosum* possibly belong here

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

149. *Coenogonium flavum* (Malcolm & Vězda) Malcolm

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

150. *Coenogonium interplexum* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz.

151. *Coenogonium pineti* (Schrad. ex Ach.) Lücking & Lumbsch

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

152. *Coenogonium strigosum* Rivaz Plata, Lücking & Chaves

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) probably as *Dimerella lutea*, fide A. Aptroot (pers. comm.); most Galapagos specimens most likely belong to a yet unpublished species *C. aff. luteolum*, sensu (Lücking, pers. com.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Santa Cruz, Santiago.

153. *Collema furfuraceum* Du Rietz

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

154. *Collema leptaleum* Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008).

155. *Collema pulcellum* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

156. *Collema texanum* Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008).

157. *Collemopsidium subarenisedum* (G. Salisb.) Coppins & Aptroot  
**Taxon status:** Identification not yet confirmed.  
F. Bungartz: material needs verification  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.
158. *Collemopsidium sublitorale* (Leight.) Grube & B.D. Ryan  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syns.: Pyrenocollema sublitorale, Arthopyrenia sublitoralis.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santiago.  
**References:** Santesson, R. et al. (1939).
159. *Compsocladium kalbii* Frisch  
**Taxon status:** Identification not yet confirmed.  
F. Bungartz: material identified originally by Aptroot as *Compsocladium archboldianum*, but this species does not occur in South America and if correct the identification likely refers to *Compsocladium kalbii* Frisch, unfortunately all material missing from CDS!  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Frisch, A. et al. (2007).
160. *Cora glabrata* (Spreng.) Fr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: Dictyonema glabratum fide Bungartz 2010; In Dodge (1935) und Weber (1966) as *Cora pavonia*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.  
**References:** Dodge, C.W. et al. (1935), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986), Yáñez, A. et al. (2012).
161. *Cresponea flava* (Vain.) Egea & Torrente  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Aptroot, A. et al. (2008).
162. *Cryptothecia assimilis* Makhija & Patw.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

163. *Cryptothecia striata* G. Thor

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz.

164. *Cyphellostereum imperfectum* Lücking, Barillas & Dal Forno

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Yáñez, A. et al. (2012).

165. *Cyphellostereum sp. 1*

**Taxon status:** Unpublished name (Nomen nudum).

F. Bungartz: Dictyonema phyllogenium f. defectum was described for a morphotype with a very poorly developed fungal sheath (Lücking 2008). Fig 258 E-F in Lücking (2008), however, depicts cyanobacterial trichomes that are not closely bundled as it is the case in the Galapagos material. Also, trichomes of Dictyonema phyllogenium f. defectum are appressed rather than erect, as seen in the Galapagos material. The Galapagos specimens grow on a variety of substrates, one also found on leaves of the endemic Miconia robertsoniana, but most were collected on bryophytes. The micromorphology of these specimens is quite similar, but not identical with free-living forms of Scytonema, since Cyphellostereum sp. 1 clearly presents fungal sheath cells surrounding the cyanobacteria.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Yáñez, A. et al. (2012).

166. *Dibaeis soredata* Kalb & Gierl

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: material confirmed per TLC by K. Kalb, December 2011

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz, Santiago.

167. *Dictyographa arabica* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: Opegrapha arabica (Müll. Arg.) Vain.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Unknown.

**References:** Ertz, D. et al. (2010).

168. *Dictyonema galapagoense* Yáñez, Dal-Forno & Bungartz

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Holotype Bungartz 8517 (CDS 41163)



**Origin:** Native, Endemic.  
**IUCN Red List:** Endangered.  
**Galapagos Distribution:** Floreana, San Cristóbal.  
**References:** Yáñez, A. et al. (2012).

169. *Dictyonema pectinatum* Dal Forno, Yáñez & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Yáñez, A. et al. (2012).

170. *Dictyonema schenkianum* (Müll. Arg.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
F. Bungartz: the correct spelling is 'schenkianum' because the basionym is *Laudatea schenkiana* Müll. Arg., Parmastro erroneously spelled the epithet with 'ck' as '*Dictyonema sericeum* f. *schenckianum*'.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Kirk, P. (ed.) et al. (2010), Yáñez, A. et al. (2012).

171. *Dictyonema sericeum* (Sw.) Berk.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
reported by Weber (1986) as *Dictyonema guadelupense*; only the material forming bracket-like shelves belongs here  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Lawrey, J.D. et al. (2009), Weber, W.A. et al. (1986).

172. *Dimidiographa loandensis* (Nyl.) Ertz, Bungartz & Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Santa Cruz, Santa Fé, Santiago.  
**References:** Ertz, D. et al. (2009), Ertz, D. et al. (2010).

173. *Diorygma poitaei* (Fée) Kalb, Staiger & Elix

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
In Weber (1986) as *Graphina virginea*, fide F. Bungartz 2008  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Not Evaluated.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).

174. *Diploschistes actinostomus* (Pers.) Zahlbr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
175. *Diploschistes badius* Lumbsch & Elix  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
F. Bungartz: previously misidentified as *D. aeneus*, but material contains gyrophoric acid  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela.
176. *Diploschistes cinereocaesius* (Sw.) Vain.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
In Weber (1986) as *Diploschistes scruposus*, fide A. Aptroot (pers. comm.)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Isabela, San Cristóbal, Santa Cruz, Santa Fé, Santiago.
177. *Diploschistes euganeus* (A. Massal.) Zahlbr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** San Cristóbal.
178. *Diploschistes muscorum ssp. bartlettii* Lumbsch  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Lumbsch, H.T. et al. (1987).
179. *Diploschistes rampoddensis* (Nyl.) Zahlbr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Isabela, Santa Cruz.
180. *Dirina catalinariae f. catalinariae* Hasse  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

181. *Dirina catalinariae f. sorediata* Tehler  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.
182. *Dirina paradoxa ssp. approximata* (Fée) Tehler  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Dirina herrei* & *Dirina approximata*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Aptroot, A. et al. (2008).
183. *Dirinaria aegialita* (Afzel. ex Ach.) B.J. Moore  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Phycia aegialita*, fide Elix & McCarthy (1998)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Pinzón, Santa Cruz, Santiago.  
**References:** Dodge, C.W. et al. (1936), Weber, W.A. et al. (1966).
184. *Dirinaria applanata* (Fée) D.D. Awasthi  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
According to A. Aptroot (pers. comm.) in Weber (1986) probably also as *Dirinaria leopoldii*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Weber, W.A. et al. (1986).
185. *Dirinaria confluens* (Fr.) D.D. Awasthi  
**Taxon status:** Taxonomic status unresolved or unrevised.  
Syn.: *Phycia confluens*, fide Elix & McCarthy (1998); the only CDS specimen (Ap 63111) has a UV-medulla and otherwise looks like *D. confusa*, this record is thus probably a misidentification, but check COLO loan, and do chemistry!!!, fide F. Bungartz  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
186. *Dirinaria confusa* D.D. Awasthi  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
A. Aptroot (pers. comm.) suspects that Weber's specimens are misidentification of *Dirinaria aegialita*. However, TLC by K.Kalb & F. Bungartz confirms that the specimens have indeed been correctly identified as *D. confusa*.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, Pinzón, Santa Cruz, Santiago.

**References:** Weber, W.A. et al. (1986).

187. *Dirinaria consimilis* (Stirt.) D.D. Awasthi

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

188. *Dirinaria leopoldii* (Stein) D.D. Awasthi

**Taxon status:** Accepted name; taxon occurs in Galapagos.

One specimen of Weber cited in Awasthi (1975): South Plaza , Weber L-40110; Two specimens in COLO (L-40736, L-40762), coll. Itow

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Santa Cruz, Santiago.

**References:** Awasthi, D.D. et al. (1975), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

189. *Dirinaria neotropica* Kalb

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Genovesa, Isabela, Pinta, Pinzón, Santa Cruz, Santiago.

190. *Dirinaria papillulifera* (Nyl.) D.D. Awasthi

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz, Santiago.

191. *Dirinaria picta* (Sw.) Schaer. ex Clem.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Physcia picta*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

192. *Dyplolabia afzelii* (Ach.) A. Massal.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Graphis afzelii*

**Origin:** Native, Indigenous.

**IUCN Red List:** Critically Endangered.

**Galapagos Distribution:** Floreana, Santiago.

**References:** Bungartz, F. et al. (2009), Weber, W.A. et al. (1986).

193. *Echinoplaca leucotrichoides* (Vain.) R. Sant.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

194. *Endocarpon nigromarginatum* H. Harada

**Taxon status:** Accepted name; taxon occurs in Galapagos.

material confirmed by O. Breuss

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón.

195. *Endocarpon pallidellum* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

O. Breuss: previously rejected, but one record now confirmed (Bungartz, F. 6527, CDS 34745)

**Origin:** Not In Galapagos, Not In Galapagos.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

196. *Endocarpon petrolepideum* (Nyl.) Hue

**Taxon status:** Accepted name; taxon occurs in Galapagos.

material confirmed by O. Breuss

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santiago.

197. *Endocarpon pusillum* Hedw.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: previously already confirmed by Weber (1986), material confirmed by Breuss, but some specimens are *Endocarpon pallidellum* Ach.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

198. *Enterographa anguinella* (Nyl.) Redinger

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Isabela, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2008).

199. *Enterographa leucolyta* (Nyl.) Redinger  
**Taxon status:** Identification not yet confirmed.  
F. Bungartz: identification cannot be verified, specimen missing (Aptroot 63270, CDS 30006; unicate loan not returned)  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Aptroot, A. et al. (2008).
200. *Enterographa pallidella* (Nyl.) Redinger  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Santa Cruz, Santiago.  
**References:** Aptroot, A. et al. (2008).
201. *Enterographa subserialis* (Nyl.) Redinger  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Santa Cruz, Santiago.  
**References:** Aptroot, A. et al. (2008).
202. *Erioderma mollissimum* (Samp.) Du Rietz  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santiago.
203. *Erioderma sorediatum* D.J. Galloway & P.M. Jørg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
204. *Everniastrum vexans* (Zahlbr. ex W.L. Culb. & C.F. Culb.) Hale ex Sipman  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Parmelia vexans*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).
205. *Fellhanera encephalarti* (V■zda) V■zda  
**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

206. *Fellhanera parvula* (Vezda) Vezda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

207. *Fellhanera rubida* (Müll. Arg.) Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Santa Cruz.

208. *Fellhanera stanhopiae* (Müll. Arg.) Lücking, Lumbsch & Elix

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

209. *Fellhanera sublecanorina* (Nyl.) Vezda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Bacidia sublecanorina*, fide A. Aptroot (pers. comm.); specimen in COLO (63764, in packet of *Tapellaria epiphylla*), det. Vezda

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

210. *Fissurina cf. comparilis* (Nyl.) Nyl.

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

F. Bungartz: preliminary identification based on a single specimen (Aptroot 63929) only.

**Origin:** No Data.

**Galapagos Distribution:** Floreana, Santa Cruz.

**References:** Bungartz, F. et al. (2009).

211. *Fissurina columbina* (Tuck.) Staiger

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz.

**References:** Bungartz, F. et al. (2009).

212. *Fissurina dumastioides* (Fink) Staiger  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Bungartz, F. et al. (2009).
213. *Flakea papillata* O.E. Erikss.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Agonimia papillata*, fide Index Fungorum and A. Aptroot; Syn.: *Psoroglaena cubensis* auct. non Müll. Arg., fide Elix & McCarthy (1998)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Pinta, Pinzón, Santa Cruz.  
**References:** Elix, J.A. et al. (1998), Muggia, L. et al. (2009), Weber, W.A. et al. (1993).
214. *Flavoparmelia leucoxantha* (Müll. Arg.) Hale ex DePriest & B.W. Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Pseudoparmelia leucoxantha*.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española, Floreana, Isabela, Santa Cruz.
215. *Glyphis cicatricosa* Ach.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
216. *Glyphis scyphulifera* (Ach.) Staiger  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, San Cristóbal, Santiago.  
**References:** Bungartz, F. et al. (2009).
217. *Gomphillus ophiosporus* Kalb & Vězda  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santiago.
218. *Graphis acharii* Fée  
**Taxon status:** Accepted name; taxon occurs in Galapagos.



**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).

219. *Graphis adpressa* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Santa Cruz.  
**References:** Bungartz, F. et al. (2009).

220. *Graphis anfractuosa* (Eschw.) Eschw.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.  
**References:** Bungartz, F. et al. (2009).

221. *Graphis caesiella* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Bungartz, F. et al. (2009), Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

222. *Graphis cincta* (Pers.) Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

223. *Graphis cleistomma* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Vulnerable.  
**Galapagos Distribution:** Isabela, Santiago.  
**References:** Bungartz, F. et al. (2009).

224. *Graphis conferta* Zenker

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

225. *Graphis crebra* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

226. *Graphis dichotoma* (Müll. Arg.) Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santiago.

**References:** Bungartz, F. et al. (2009).

227. *Graphis disserpens* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

**References:** Kirk, P. (ed.) et al. (2010).

228. *Graphis elongata* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

229. *Graphis flavominiata* Moncada & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

230. *Graphis glaucescens* Fée

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Graphis bulacana* Vain.

**Origin:** Introduced, Questionable Native.

**IUCN Red List:** Not Evaluated.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

**References:** Bungartz, F. et al. (2009).

231. *Graphis handelii* Zahlbr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
232. *Graphis immersella* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.
233. *Graphis intricata* Fée  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).
234. *Graphis leptospora* Vain.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
235. *Graphis longula* Kremp.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** San Cristóbal.  
**References:** Kirk, P. (ed.) et al. (2010).
236. *Graphis modesta* Zahlbr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Pinta, San Cristóbal.  
**References:** Kirk, P. (ed.) et al. (2010).
237. *Graphis oxyclada* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

**References:** Kirk, P. (ed.) et al. (2010).

238. *Graphis paradisserpens* Sipman & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

**References:** Kirk, P. (ed.) et al. (2010).

239. *Graphis pedunculata* Bungartz & Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Holotype Bungartz 5701 (CDS 28799)

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santiago.

**References:** Bungartz, F. et al. (2009).

240. *Graphis phaeospora* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Santa Cruz.

**References:** Bungartz, F. et al. (2009).

241. *Graphis platycarpa* Eschw.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

**References:** Kirk, P. (ed.) et al. (2010).

242. *Graphis rimulosa* (Mont.) Trevis.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

243. *Graphis subchrysocarpa* Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1993) as *Phaeographina chrysocarpa*

**Origin:** Native, Indigenous.

**IUCN Red List:** Critically Endangered.

**Galapagos Distribution:** Pinta.

**References:** Bungartz, F. et al. (2009), Weber, W.A. et al. (1993).

244. *Graphis tenella* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

245. *Graphis vestitoides* (Fink) Staiger

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Pinta, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

246. *Gyalectidium catenulatum* (Cavalc. & A.A. Silva) L.I. Ferraro, Lücking & Sérus.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

247. *Gyalectidium eskucheii* Sérus. & J.R. De Sloover

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

248. *Gyalectidium filicinum* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

249. *Gyalectidium imperfectum* Vězda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

250. *Gyalideopsis subaequatoriana* Lücking & W.R. Buck

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

251. *Gyalideopsis vulgaris* (Müll. Arg.) Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

252. *Haematomma personii* (Fée) A. Massal.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1966, 1986) and Elix & McCarthy (1998) as *Haematomma puniceum*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

253. *Helminthocarpon leprevostii* Fée

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

254. *Heppia despreauxii* (Mont.) Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

255. *Herpothallon confluenticum* Aptroot & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz.

256. *Herpothallon echinatum* Aptroot, Lücking & Will-Wolf

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Santa Cruz.

257. *Herpothallon granulare* (Sipman) Aptroot & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz, Santiago.

258. *Herpothallon rubrocinctum* (Ehrenb.: Fr.) Aptroot, Lücking & G. Thor

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Herpothallon sanguineum*, *Chiodecton sanguineum* and *C. rubrocinctum*, fide Aptroot et al. (2009)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2009), Dodge, C.W. et al. (1935), Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

259. *Herpothallon rubroechinatum* Frisch & G. Thor

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

260. *Heterocyphelium leucampyx* (Tuck.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Isabela, Pinta.

261. *Heterodermia albicans* (Pers.) Swinscow & Krog

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Physcia albicans*, fide F. Bungartz, *Physcia crispa*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz, Wolf.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

262. *Heterodermia antillarum* (Vain.) Kurok.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, Pinta, Pinzón, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

263. *Heterodermia appalachensis* Kurok.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz & K. Kalb: this species is reported endemic to the North American Appalachians, but very similar to *H. lutescens*, the only difference being the soralia (capitate to labriform in *H. appalachensis*; subcapitate in *H. lutescens*), both forms occur in Galapagos and quite possibly belong to one and the same species

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

264. *Heterodermia circinalis* (Zahlbr.) W.A. Weber

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anaptychia leucomelaena* f. *circinalis*, *Anaptychia circinalis*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Pinta, Santiago.

**References:** Weber, W.A. et al. (1981).

265. *Heterodermia comosa* (Eschw.) Follmann & Redón

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anaptychia comosa*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

266. *Heterodermia coralliphora* (Taylor) Skorepa

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anaptychia coralliphora* [corallophora] Taylor; F. Bungartz & K. Kalb: the spelling "corallophora" is an orthographical error that needs to be corrected to "corallifera".

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

267. *Heterodermia diademata* (Taylor) D.D. Awasthi

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: wrongly keyed in Martins (2007); the species is fertile and has no vegetative propagules.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela.

**References:** Martins, M.F.N. et al. (2007).

268. *Heterodermia galactophylla* (Tuck.) W.L. Culb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz.

269. *Heterodermia japonica* (M. Satô) Swinscow & Krog

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.



**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Santa Cruz, Santiago.

270. *Heterodermia leucomela ssp. boryi* (Fée) Swinscow & Krog

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz.

271. *Heterodermia leucomela ssp. leucomela* (Fée) Swinscow & Krog

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

272. *Heterodermia lutescens* (Kurok.) Follmann

**Taxon status:** Taxonomic status unresolved or unrevised.

Syn.: *Anaptychia lutescens*; F. Bungartz: How does this differ from *H. appalachensis*?

**Origin:** No Data.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

273. *Heterodermia obscurata* (Nyl.) Trevis.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anaptychia obscurata*, fide Index Fungorum

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

274. *Heterodermia podocarpa* (Bél.) D.D. Awasthi

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anaptychia podocarpa*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Dodge, C.W. et al. (1936), Weber, W.A. et al. (1966).

275. *Heterodermia speciosa* (Wulfen) Trevis.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz, Santiago.

276. *Heterodermia squamulosa* (Degel.) W.L. Culb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) and Elix & McCarthy (1998) as *Heterodermia lepidota*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

277. *Heterodermia verrucifera* (Kurok.) W.A. Weber

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anaptychia leucomelaena* f. *verrucifera*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Weber, W.A. et al. (1981).

278. *Hyperphyscia adglutinata* (Flörke) H. Mayrhofer & Poelt

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Physcia adglutinata*, fide Elix & McCarthy (1998); In Weber (1986) as *Phaeophyscia hispidula*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Dodge, C.W. et al. (1936), Weber, W.A. et al. (1966).

279. *Hyperphyscia pandani* (H. Magn.) Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, San Cristóbal.

280. *Hypotrachyna costaricensis* (Nyl.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

281. *Hypotrachyna exsplendens* (Hale) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Santa Cruz.

282. *Hypotrachyna isidiocera* (Nyl.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmelia isidiocera*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

283. *Hypotrachyna microblasta* (Vain.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmelia microblasta*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

284. *Hypotrachyna osseoalba* (Vain.) Y.S. Park & Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

285. *Hypotrachyna sanjosensis* Elix, T.H. Nash & Sipman

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela, Santa Cruz.

286. *Julella aviceniae* (Borse) K.D. Hyde

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: non-lichenized phytopathogen

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

287. *Julella cf. asema* R.C. Harris

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santa Cruz.

288. *Julella cf. vitrispora* (Cooke & Harkn.) M.E. Barr

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

F. Bungartz & R. Miranda: the material is similar to *J. vitrispora* but does not agree in all characters; possibly an undescribed species.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Española, Floreana, Pinzón, Santa Cruz.

289. *Julella geminella* (Nyl.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz, Santiago.

290. *Lecanactis abietina* (Ehrh. ex Ach.) Körb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

fide annotations J.M. Egea & P. Torrente, 1990 and F. Bungartz, 2009 (FH-TUCK 197166)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

291. *Lecanactis epileuca* (Nyl.) Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

**References:** Kirk, P. (ed.) et al. (2010).

292. *Lecanographa brattiae* (Egea & Ertz) Ertz & Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Opegrapha brattiae* Ertz & Tehler

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Unknown.

**References:** Ertz, D. et al. (2010).

293. *Lecanographa hypothallina* (Zahlbr.) Egea & Torrente

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Pinzón, Santa Cruz.

**References:** Aptroot, A. et al. (2008).

294. *Lecanographa laingiana* Diederich, Egea & Sipman

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Isabela, Pinta, Santa Cruz, Santa Fé.

**References:** Aptroot, A. et al. (2008).

295. *Lecanographa lyncea* (Sm.) Egea & Torrente

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Isabela, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2008).

296. *Lecanographa microcarpella* (Müll. Arg.) Egea & Torrente

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Aptroot & Sparrius (2008) as *Lecanographa illecebrosula*, fide F. Bungartz annotations, 2008 and fide D. Ertz annotations, 2011.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2008).

297. *Lecanographa subcaesioides* Egea & Torrente

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, Santa Cruz, Santiago, Wolf.

**References:** Aptroot, A. et al. (2008).

298. *Lecanora avium* (Zahlbr.) Hertel

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Lecidea chilena*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

299. *Lecanora caesiorubella* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Lecanora caesiorubella* ssp. *glaucomodes*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

300. *Lecanora expallens* Ach.

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santiago.

301. *Lecanora floridula* Lumbsch

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Guderley, R. et al. (1999).

302. *Lecanora galactiniza* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

303. *Lecanora legalloana* Elix & Øvstedal

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

304. *Lecanora leprosa* Fée

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.

**References:** Elix, J.A. et al. (1998), Guderley, R. et al. (1999), Weber, W.A. et al. (1986).

305. *Lecanora oreinoides* (Körb.) Hertel & Rambold

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Lecidea oreinoides*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

306. *Lecanora pseudopinguis* W.A. Weber

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

307. *Lecanora schindleri* Guderley

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Guderley, R. et al. (1999).

308. *Lecanora strobilina* (Spreng.) Kieff.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santiago.

309. *Lecanora subcrenulata* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

310. *Lecanora subimmersens* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santiago.

311. *Lecanora subimmersa* ssp. *ramboldii* Lumbsch & Elix

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: Both chemotypes occur in Galapagos (previously only *L. subimmersa* ssp. *subimmersa* reported by Guderley 1999)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

**References:** Guderley, R. et al. (1999).

312. *Lecanora subimmersa* ssp. *subimmersa* (Fée) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Pinta, Pinzón, San Cristóbal, Santiago.

**References:** Guderley, R. et al. (1999).

313. *Lecanora substrobilina* Printzen

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

314. *Lecanora sulfurescens* Fée

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Darwin, Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz,

Santa Fé, Santiago, Wolf.

**References:** Elix, J.A. et al. (1998), Guderley, R. et al. (1999), Weber, W.A. et al. (1986).

315. *Lecanora tropica* Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Guderley, R. et al. (1999).

316. *Lecidopyrenopsis corticola* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta.

317. *Leiorreuma sericeum* (Eschw.) Staiger

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Fernandina, Isabela, Pinta, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

318. *Lempholemma dussii* (Vain.) Zahlbr.

**Taxon status:** Identification not yet confirmed.

In Weber (1993) and Elix & McCarthy (1998) erroneously as *Lempholemma dussiana*; Specimens in COLO: Weber & Lanier (L-62925), Weber (L-63035); material being revised by M. Schultz

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

319. *Lepraria lobificans* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

320. *Lepraria usnica* Sipman

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

321. *Lepraria vouauxii* (Hue) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.



**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

322. *Leprocaulon tenellum* (Tuck.) Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Stereocaulon albicans*, fide Elix & McCarthy (1998), *Stereocaulon tenellum*

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

323. *Leprocollema novocaledonianum* A.L. Sm. [as 'nova-caledonianum']

**Taxon status:** Identification not yet confirmed.

F. Bungartz: previously listed as "*Lemmopsis novae-caledoniarum* fide Aptroot", but this combination is problematic, because this has never been published; M. Schultz: the specimen is currently being revised and it is probably not identical with *Leprocollema novaecaledoniarum*, but possibly a new species.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

324. *Leptogium azureum* (Sw. ex Ach.) Mont.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008).

325. *Leptogium cyanescens* (Pers.) Körb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008), Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

326. *Leptogium javanicum* (Mont. & Bosch) Mont.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Bungartz, F. et al. (2008).

327. *Leptogium marginellum* (Sw.) Gray

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008), Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

328. *Leptogium milligranum* Sierk

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) and Elix & McCarthy (1998) cited as *L. millegranum*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Fernandina, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

329. *Leptogium phyllocarpum* (Pers.) Mont.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008).

330. *Leptogium punctulatum* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Leptogium foveolatum*, fide Weber (1981)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2008), Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

331. *Leptotrema mastoideum* Müll. Arg.

**Taxon status:** Taxonomic status unresolved or unrevised.

F. Bungartz: listed by Weber (1966) probably because the taxon is mentioned by Dodge [1936: Santa María (charles or Floreana) January 1934, R.W. Taylor 903], but no specimen found in COLO, CAS or FH; later checklists by Weber (1985) or Elix & McCarty (1988) ignored this taxon.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Dodge, C.W. et al. (1936), Weber, W.A. et al. (1966).

332. *Leptotrema wightii* (Taylor) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Myriotrema wightii*, fide F. Bungartz

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

333. *Leucodecton occultum* (Eschw.) Frisch  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Myriotrema compunctum*, *Leptotrema compunctum*, fide F. Bungartz, 2008  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.
334. *Leucodecton subcompunctum* (Nyl.) A. Frisch  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** San Cristóbal.
335. *Lichenoconium sp. 1*  
**Taxon status:** Taxon not identified to species, subspecies, form or variety.  
Index Fungorum: anamorphic Pezizomycotina  
**Origin:** No Data.  
**Galapagos Distribution:** Isabela.  
**References:** Kirk, P. (ed.) et al. (2010).
336. *Lithothelium fluorescens* Aptroot & Sipman  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Pinzón, Santa Cruz.
337. *Lithothelium illotum* (Nyl.) Aptroot  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Santa Cruz.
338. *Lithothelium microsporum* R.C. Harris  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
F. Bungartz & R. Miranda: Galapagos material of this species erroneously referred to as *L. obtectum* by Aptroot (2006).  
**Origin:** Native, Endemic.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Aptroot, A. et al. (2006).
339. *Lobaria patinifera* (Taylor) Hue  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
In Weber (1986) und Elix & McCarthy (1998) as *Lobaria dissecta*  
**Origin:** Native, Indigenous.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

340. *Lobariella pallida* (Hook. f.) Moncada & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Santa Cruz.

**References:** Lumbsch, H.T. et al. (2010).

341. *Loxospora ochrophaea* (Tuck.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Haematomma ochrophaea*, fide Index Fungorum

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

342. *Malcolmiella cf. granifera* (Ach.) Kalb & Lücking

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

Syn.: *Lecidea cf. granifera*, fide Index Fungorum

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

343. *Malcolmiella polycampia* (Tuck.) Cáceres & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.

344. *Megalaria bengalensis* Jagadeesh, Aptroot, G.P. Sinha & Kr.P. Singh

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Floreana, San Cristóbal.

**References:** Jagadeesh Ram, T.A.M. et al. (2007).

345. *Megalaria pulverea* (Borrer) Haffelner & Schreiner

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Sy.: *Catinaria pulverea*

**Origin:** No Data.

**Galapagos Distribution:** Unknown.

346. *Megalospora galapagoensis* Bungartz, Ziemmeck & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type:—ECUADOR. Galápagos: Isla San Cristóbal, trail from Cerro Pelado to El Rapioso, 0°52'S, 89°28'W, 392 m, transition zone, Psidium guajava forest with some old Hippomane mancinella trees and dense understory of Rubus niveus, Tournefortia rufosericea and Zanthoxylum fagara, on bark, S-exposed side of inclined Hippomane mancinella trunk (ca. 20 cm in diameter), semi-shaded, wind- and rain-sheltered, August 2008, Bungartz 8516 (holotype CDS-41162, isotype F).

**Origin:** Native, Endemic.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

**References:** Lumbsch, H.T. et al. (2010).

347. *Milospium graphidiorum* (Nyl.) D. Hawksw.

**Taxon status:** Identification not yet confirmed.

Index Fungorum: anamorphic Pezizomycotina

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

348. *Minutoexcipula sp. 1*

**Taxon status:** Taxon not identified to species, subspecies, form or variety.

Index Fungorum: anamorphic Pezizomycotina

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

349. *Mycocalicium americanum* (R. Sant.) Tibell

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz, Santa Fé, Santiago.

350. *Mycomicrothelia subfallens* (Müll. Arg.) D. Hawksw.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

351. *Mycomicrothelia thelena* (Ach.) D. Hawksw.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, San Cristóbal.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

352. *Mycoporum compositum* (A. Massal.) R.C. Harris  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
F. Bungartz: Aptroot 63342, material needs verification  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Pinta, Santa Cruz, Santiago.
353. *Mycoporum eschweileri* (Müll. Arg.) R.C. Harris  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Tomasellia eschweileri* (Müll. Arg.) R.C. Harris  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, Santa Cruz, Santiago.
354. *Mycoporum sparsellum* Nyl.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.
355. *Myriotrema olivaceum* Fée  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
specimen in COLO not seen (55414): Santiago, on *Zanthoxylum*, coll. Pike, det. Hale  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
356. *Normandina pulchella* (Borrer) Nyl.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
357. *Ochrolechia africana* Vain.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
In Weber (1966, 1986) and Elix & McCarthy (1998) as *Ochrolechia pallescens*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

358. *Ochrolechia pallescens s.l.* (L.) A. Massal.

**Taxon status:** Identification not yet confirmed.

Syn.: *Lecanora pallescens*, fide Elix & McCarthy (1998); chemical reactions agree with *O. pallescens*, but the Galapagos material grows in arid vegetation

**Origin:** No Data.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

359. *Ochrolechia subpallescens* Verseghy

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Unknown.

360. *Opegrapha agelaotera* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

361. *Opegrapha astraea* Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Santa Cruz.

362. *Opegrapha cactacearum* Riedl

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé.

363. *Opegrapha cf. foreaui* (Moreau) Hafellner & R. Sant.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

364. *Opegrapha diagrapha* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

365. *Opegrapha difficilior* Nyl.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Pinzón, Santa Cruz, Santiago.
366. *Opegrapha herbarum* Mont.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Pinta, Santa Cruz.
367. *Opegrapha melanospila* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.
368. *Opegrapha sp. nov. 1 "norstictica"*  
**Taxon status:** Unpublished name (Nomen nudum).  
**Origin:** Native, Endemic.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española, Floreana, San Cristóbal, Santa Cruz, Santa Fé, Santiago.
369. *Opegrapha trilocularis* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Santa Cruz.
370. *Opegrapha trochodes* Coppins, F. Berger & Ertz  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Pinta, Santiago.
371. *Opegrapha vulgata* (Ach.) Ach.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española, Floreana, Santa Cruz.
372. *Opegrapha xerica* Torrente & Egea  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.



**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela.

373. *Pannaria lurida* (Mont.) Nyl.

**Taxon status:** Taxonomic status unresolved or unrevised.

F. Bungartz: record based on a minute specimen fragment collected by Snodgrass & Heller in Fernandina and isolated by B. Weber from the original collection of *Pseudocyphellaria aurata*; locality data are very sparse (Fernandina, 200ft.) and it is not possible to say what original collection the material was isolated from. The specimen was identified by first by Weber as *Erioderma cf. wrightii* Tuck., then annotated by P.M.

Joergensen 1978 as *Pannaria lurida* (Mont.) Nyl.

**Origin:** No Data.

**Galapagos Distribution:** Unknown.

374. *Parapyrenis "portoricensis"*

**Taxon status:** Taxonomic status unresolved or unrevised.

F. Bungartz: nomen nudum; specimen identified by A. Aptroot (Aptroot 63057) agrees well with *P. aurora*, the only difference being that the Galapagos material has perithecia are broadly elongate, possibly an artifact caused by the perithecia being formed in between the wood fibers of the substrate.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

375. *Parapyrenis aurora* (Zahlbr.) Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

376. *Parmeliella pannosa* (Sw.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: first reported as *Parmeliella pannosa*, which is the correct identification, the Galapagos material does not belong to *Parmeliella mariana* as suggested by Elix & McCarthy (1998); Index Fungorum suggests that *P. pannosa* is a synonym of *P. mariana* based on the Australian checklist, this is erroneous, both taxa are good species, *P. pannosa*, however, does not exist in Australia

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

377. *Parmeliella stylophora* (Vain.) P.M. Jørg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

378. *Parmelinella wallichiana* (Taylor) Elix & Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
379. *Parmelinopsis horrescens* (Taylor) Elix & Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.
380. *Parmelinopsis minarum* (Vain.) Elix & Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.
381. *Parmelinopsis spumosa* (Asahina) Elix & Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz, Santiago.
382. *Parmotrema aberrans* Vain. & Abbeyes  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
A. Spielmann: previously erroneously identified as *P. neotropicum*, *P. flavescens* or *P. xanthinum*  
**Origin:** No Data.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santiago.
383. *Parmotrema aff. subsidiosum* (Müll. Arg.) Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
A. Spielmann: with unusually well developed ciliate isidia  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz.
384. *Parmotrema cf. bangü* (Vain.) Hale  
**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.  
A. Spielmann: only one single specimen at CDS that still needs TLC for confirmation.  
**Origin:** Not In Galapagos, Not In Galapagos.  
**Galapagos Distribution:** Unknown.

385. *Parmotrema clavuliferum* (Räsänen) Streimann  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Rimelia clavulifera*  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.
386. *Parmotrema conformatum* (Vain.) Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
387. *Parmotrema crinitum* (Ach.) M. Choisy  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Parmelia crinita*, fide Elix & McCarthy (1998)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
388. *Parmotrema cristiferum* (Taylor) Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Parmelia cristifera*, fide Elix & McCarthy (1998)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).
389. *Parmotrema dilatatum* (Vain.) Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
390. *Parmotrema dominicanum* (Vain.) Hale  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Parmelia dominicana*, fide Elix & McCarthy (1998)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

391. *Parmotrema eborinum* (Hale) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

no description found, keys out in Sipman's key sensu Hale, also annot. specimens from Hale in COLO loan(L-40237,L-40505);without apothecia,isidia,soredia,± lobulate(i.e., broader lobes with smaller marginal lobes),medulla P+ red,K+ yellow turning orange, C-

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, San Cristóbal.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

392. *Parmotrema endosulphureum* (Hillmann) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmelia endosulphurea*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

393. *Parmotrema grayanum* (Hue) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

394. *Parmotrema internexum* (Nyl.) Hale ex DePriest & B.W. Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Santiago.

395. *Parmotrema latissimum* (Fée) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, San Cristóbal.

396. *Parmotrema mellissii* (C.W. Dodge) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

397. *Parmotrema praesorediosum* (Nyl.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmelia praesorediosa*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

398. *Parmotrema reticulatum* (Taylor) M. Choisy

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: Rimelia reticulata, Parmelia reticulata, Parmotrema leucosemethetum, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

399. *Parmotrema sancti-angeli* (Lyngé) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santiago.

400. *Parmotrema subsidiosum* (Müll. Arg.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: Rimelia subsidiosa

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

401. *Parmotrema tinctorum* (Despr. ex Nyl.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: Parmelia tinctorum, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago, Wolf.

**References:** Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

402. *Parmotrema ultralucens* (Krog) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: Parmelia subcrinita, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

403. *Parmotrema xanthinum* (Müll. Arg.) Hale

**Taxon status:** Taxonomic status unresolved or unrevised.

Specimen in COLO (40757) not seen: Cavagnaro s.n., Pinzón, caldera rim, 300 m; F. Bungartz: needs verification

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

404. *Peltigera dolichorrhiza* (Nyl.) Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Isabela.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

405. *Peltigera ulcerata* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

previously misidentified as *P. didactyla* (originally reported by Weber 1986 as *P. erumpens*, later re-identified as *P. spuria* and subsequently cited by Elix & McCarthy as *P. didactyla*), the specimens are not tomentose and thus misidentifications of *P. ulcerata* Müll. Arg.

**Origin:** Native, Indigenous.

**IUCN Red List:** Critically Endangered.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

406. *Peltula bolanderi* (Tuck.) Wetmore

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal.

407. *Peltula euploca* (Ach.) Poelt

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Heppia euploca*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Darwin, Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago, Wolf.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

408. *Peltula impressa* (Vain.) Swinscow & Krog

**Taxon status:** Accepted name; taxon occurs in Galapagos.

material confirmed by M. Schultz

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

409. *Peltula omphaliza* (Nyl.) Wetmore  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española.  
**References:** Kirk, P. (ed.) et al. (2010).
410. *Peltula placodizans* (Zahlbr.) Wetmore  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.
411. *Pertusaria albinea* Tuck. [non Müll. Arg.]  
**Taxon status:** Identification not yet confirmed.  
A. Aptroot: Uncertain what this species is, depends on the chemistry; Type (FH): on bark, Galapagos Islands, coll. Rev. T. Hill, Hassler Expedition (F. Bungartz: specimen not found during visit to FH, possibly on loan to I. Messuti, one specimen collected and identified by Weber as *P. albinea*, L-40346, COLO 188868).  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).
412. *Pertusaria hypothamnolica* Dibben  
**Taxon status:** Identification not yet confirmed.  
**Origin:** No Data.  
**Galapagos Distribution:** Isabela, Pinzón, Santa Cruz.
413. *Pertusaria pustulata* (Ach.) Duby  
**Taxon status:** Identification not yet confirmed.  
In Weber (1986) probably as *Pertusaria bispora*  
**Origin:** No Data.  
**Galapagos Distribution:** Isabela, Santa Cruz.
414. *Pertusaria tejocotensis* de Lesd.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Isabela, Pinta, Pinzón, Santa Cruz, Santa Fé, Santiago.
415. *Pertusaria texana* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Pertusaria bispora* Farl. ex Lindner; Type in Farlow Herbarium (FH): Genovesa, A. Stewart, 153, Isotype in CAS, No. 119734; FH 197376 is *Pertusaria texana*, fide F. Bungartz annotation, 2009  
**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

416. *Pertusaria xanthodes* Müll. Arg.

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santa Cruz.

417. *Phaeographis atromaculata* (A.W. Archer) A.W. Archer

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Phaeographis kalbii*, fide Bungartz et al. (2009)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Fernandina, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

418. *Phaeographis brasiliensis* (A. Massal.) Kalb & Matthes-Leicht

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

419. *Phaeographis decipiens* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela.

**References:** Bungartz, F. et al. (2009).

420. *Phaeographis dendritica* (Ach.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

421. *Phaeographis fusca* Staiger

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).



422. *Phaeographis intricans* (Nyl.) Staiger  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).
423. *Phaeographis leiogrammodes* (Kremp.) Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Pinzón, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).
424. *Phaeographis lobata* (Eschw.) Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).
425. *Phaeographis major* (Kremp.) Lücking  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).
426. *Phaeographis punctiformis* (Eschw.) Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.  
**References:** Bungartz, F. et al. (2009).
427. *Phaeographis striata* Bungartz  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Holotype Bungartz 6606 (CDS 34826)  
**Origin:** Native, Endemic.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, San Cristóbal.  
**References:** Bungartz, F. et al. (2009).
428. *Phaeophyscia pusilloides* (Zahlbr.) Essl.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santiago.

429. *Phyllopsora confusa* Swinscow & Krog

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.

430. *Phyllopsora intermediella* (Nyl.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Floreana, Santa Cruz, Santiago.

431. *Phyllopsora kalbii* Brako

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santiago.

432. *Phyllopsora parvifolia* (Pers.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santiago.

433. *Physcia atrostriata* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Moberg, R. et al. (1990).

434. *Physcia crispa* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, Santiago.  
**References:** Elix, J.A. et al. (1998).

435. *Physcia decorticata* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

436. *Physcia dubia* (Hoffm.) Lettau

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

437. *Physcia erumpens* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, Santa Cruz, Santiago.

438. *Physcia integrata* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

439. *Physcia kalbii* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

440. *Physcia lobulata* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

441. *Physcia lopezii* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santiago.

442. *Physcia mexicana* B. de Lesd.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: *P. mexicana* was not included in Moberg (1990), possible syntype material in UPS is in very poor condition and until now was thought to be synonymous with *P. aipolia* (Moberg, pers. com.); Galapagos material examined by K. Kalb & F. Bungartz does not contain zeorin but it clearly does have a K<sup>+</sup> yellow medulla, it is thus chemically distinct from *Physcia aipolia* and most likely corresponds to what has been

described as *Physcia mexicana*.

**Origin:** Not In Galapagos, Not In Galapagos.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Moberg, R. et al. (1990), Weber, W.A. et al. (1986).

443. *Physcia poncinsii* Hue

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, Santa Cruz.

444. *Physcia rolfii* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, Santa Cruz, Santiago.

445. *Physcia sinuosa* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz, Santiago.

446. *Physcia solediosa* (Vain.) Lynge

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Pinzón, Santa Cruz, Santiago.

**References:** Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

447. *Physcia undulata* Moberg

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón.

448. *Physma byrsinum* (Ach.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: only one single, historic specimen (Sipman L-70, COLO L-63545, from Cerro Azul, Isabela, H. Sipman L-70, 22-25 June 1976).

**Origin:** Native, Indigenous.

**IUCN Red List:** Critically Endangered.

**Galapagos Distribution:** Isabela.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

449. *Piccolia conspersa* (Fée) Hafellner

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinta, Santa Cruz.

450. *Placidium squamulosum* (Ach.) Breuss

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Unknown.

451. *Polychidium muscicola* (Sw.) Gray

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

452. *Polychidium stipitatum* Vězda & W.A. Weber

**Taxon status:** Identification not yet confirmed.

F. Bungartz: Aptroot 64694 material needs verification

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

453. *Porina atrocoerulea* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

454. *Porina cestrensis* (Tuck.) Müll. Arg. agg.

**Taxon status:** Identification not yet confirmed.

F. Bungartz: a group of very similar species; material needs further studies.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

455. *Porina conspersa* Malme

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz & R. Miranda: only one single fertile specimen in CDS, all others sterile and thus referred to *P. distans* (according to Lücking 2008).

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010), Lücking, R. et al. (2008).

456. *Porina cubana* Vázda

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

457. *Porina distans* Vázda & Vivant

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz & R. Miranda: the sterile material with coralloid isidia most likely belongs to *P. conspersa*, but since no perithecia could be found treated here according to Lücking (2008) as *P. distans*.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz.

**References:** Lücking, R. et al. (2008).

458. *Porina guentheri* (Flot.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón, Santa Cruz.

459. *Porina leptalea* (Durieu & Mont.) A.L. Sm.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

460. *Porina melanops* Malme

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

461. *Porina nitidula* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

462. *Porina nucula* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

463. *Porina tetramera* (Malme) R. Sant.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

464. *Pseudocyphellaria argyracea* (Delise) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Critically Endangered.

**Galapagos Distribution:** Floreana, Pinzón, San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Galloway, D.J. et al. (1990), Weber, W.A. et al. (1986).

465. *Pseudocyphellaria aurata* (Ach.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Sticta aurata*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Andersson, N. J. et al. (1855), Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Hooker, J.D. et al. (1847), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

466. *Pseudocyphellaria crocata* (L.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Pseudocyphellaria mougeotiana* var. *aurigera*, *Pseudocyphellaria xantholoma*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Galloway, D.J. et al. (1990), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

467. *Pseudocyphellaria dozyana* (Mont. & Bosch) D.J. Galloway

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Pseudocyphellaria mougeotiana* var. *aurigera* (= ? *Pseudocyphellaria crocata*), fide Weber (1993)

**Origin:** Native, Questionable Endemic.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Galloway, D.J. et al. (1985), Galloway, D.J. et al. (1990), Weber, W.A. et al. (1993), Weber, W.A. et al. (1986).

468. *Pseudopyrenula diluta* (Fée) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, Santa Cruz, Santiago.

469. *Pseudopyrenula subnudata* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Pseudopyrenula subgregaria*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

470. *Psilolechia lucida* (Ach.) M. Choisy

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela.

471. *Psora nipponica* (Zahlbr.) Gotth. Schneid.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Psora novomexicana*, fide Elix & McCarthy (1998), *Toninia novomexicana*: specimen in COLO (L-44020), Cavagnaro s.n., Pinzón, det. E. Timdal, 1990

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998).

472. *Psorotichia cf. hassei* Fink ex J. Hedrick

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** San Cristóbal.

473. *Psorotichia murorum* A. Massal.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

First erroneously identified as *Psorotichia schaeferi* by M. Schultz in 2006.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Schultz, M. et al. (2008).



474. *Pterygiopsis guyanensis* Schultz

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Fé.

475. *Pyrenographa irregularis* (Wehm.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: ?*Pyrenographa xylographoides* Aptroot (with submuriform spores, see comments in Harris 1995); basionym: *Phaeopeltosphaeria irregularis* Wehmeyer; Type. ECUADOR. Galapagos: South Seymour Island, on dead, decorticated wood of *Bursera graveolens*, 6 Sep 1945, Martin 6251 (NY, isotype).

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Aptroot, A. et al. (1991), Harris, R.C. et al. (1995), Martin, G.W. et al. (1948).

476. *Pyrenopsis portoricensis* Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinta, Santiago.

477. *Pyrenothrix nigra* Riddle

**Taxon status:** Identification not yet confirmed.

F. Bungartz & R. Miranda: material needs to be re-examined.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

478. *Pyrenula anomala* (Ach.) A. Massal.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

479. *Pyrenula aspistea* (Afzel.) Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Specimen in COLO: Itow (L-40634), det. Aptroot, 1991; specimens in CDS identified by Aptroot as *P. aspistea* were misidentifications of *Pyrenula costaricensis*, fide annot. R. Miranda, 2010

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

480. *Pyrenula astroidea* (Fée) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmentaria astroidea*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

481. *Pyrenula cerina* Eschw.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Pyrenula aurantiaca*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Fernandina, Floreana, Genovesa, Isabela, Marchena, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

482. *Pyrenula cf. acutispora* Kalb & Hafellner

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

F. Bungartz & R. Miranda: spore measurements of material do not agree with *P. acutispora* s.str.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela, Santa Cruz.

483. *Pyrenula cf. cuyabensis* (Malme) R.C. Harris

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

Basionym: *Parathelium cuyabense* Malme

**Origin:** Native, Indigenous.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

484. *Pyrenula cf. dermatodes* (Borrer) Schaer.

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Santa Cruz.

485. *Pyrenula concatervans* (Nyl.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Specimens in COLO: Santa Cruz: Herre 41 (L-41177), Weber (L-40220), Itow (L-40728), Fernandina: Cavagnaro (L-40469), Floreana: Weber & Lanier (L-62944)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

486. *Pyrenula confinis* (Nyl.) R.C. Harris  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Floreana, Isabela, Santa Cruz.
487. *Pyrenula costaricensis* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
488. *Pyrenula cruenta* (Mont.) Vain.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Melanotheca cruenta*, fide Elix & McCarthy (1998)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
489. *Pyrenula dermatodes* (Borrer) Schaer.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
490. *Pyrenula erumpens* R.C. Harris  
**Taxon status:** Identification not yet confirmed.  
Specimen in COLO: Santa Cruz, on Pisonia, Itow (L-40623), det. Aptroot, 1991  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).
491. *Pyrenula macularis* (Zahlbr.) R.C. Harris  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
In Weber (1986) probably as *Anthracotheceum leucostomum*, fide A. Aptroot (pers. comm.)  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Española, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Weber, W.A. et al. (1986).
492. *Pyrenula marginatula* Müll. Arg.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Pyrenula caraibica* Aptroot & Etayo

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

**References:** Kirk, P. (ed.) et al. (2010).

493. *Pyrenula massariospora* (Starbäck) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Santa Cruz, Santiago.

**References:** Kirk, P. (ed.) et al. (2010).

494. *Pyrenula microcarpa* Müll. Arg.

**Taxon status:** Taxonomic status unresolved or unrevised.

F. Bungartz & R. Miranda: all specimens in CDS misidentifications; specimen in COLO not examined: Santa Cruz, on *Cordia lutea*, Darwin Station, Weber (L-40579), det. Aptroot, 1991, as *P. cinerea* (syn. of *P. microcarpa*)

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1993).

495. *Pyrenula microtheca* R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: non *Pyrenula microcarpa* Müll. Arg.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

496. *Pyrenula nitidula* (Bres.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

497. *Pyrenula ochraceoflava* (Nyl.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anthracotheceum ochraceoflavum*, fide Elix & McCarthy (1998), *Verrucaria ochraceoflava*, fide Index Fungorum

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Fernandina, Floreana, Genovesa, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.

**References:** Elix, J.A. et al. (1998), Stewart, A. et al. (1912), Weber, W.A. et al. (1966), Weber, W.A. et al.

(1986).

498. *Pyrenula ochraceoflavens* (Nyl.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz & R. Miranda: very few specimens deviate sufficiently in spore size from *P. ochraceoflava* and the two taxa might refer to the same species.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

499. *Pyrenula quassiaecola* Fée

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

500. *Pyrenula subcongruens* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

501. *Pyrenula thelomorpha* Tuck.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, San Cristóbal, Santa Cruz, Santiago.

**References:** Kirk, P. (ed.) et al. (2010).

502. *Pyrgidium montellicum* (Beltr.) Tibell

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

503. *Pyrgillus javanicus* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

504. *Pyrrhospora quernei* (Dicks.) Körb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** No Data.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal.

505. *Pyxine albovirens* (G. Mey.) Aptroot 1987

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

506. *Pyxine berteriana* (Fée) Imshaug

**Taxon status:** Accepted name; taxon occurs in Galapagos.

The spelling *P. berteriana* is an orthographical error, fide F. Bungartz

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

507. *Pyxine cocoësi* (Sw.) Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

508. *Pyxine eschweileri* (Tuck.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Weber, W.A. et al. (1986).

509. *Pyxine petricola* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Pyxine pringlei*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

510. *Pyxine subcinerea* Stirt.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Pyxine caesiopruinosa*, fide Elix & McCarthy (1998), *Pyxine connectens*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

511. *Ramalina anceps* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2007), Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

512. *Ramalina aspera* Räsänen

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Ramalina denticulata*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2007), Brodo, I. M. et al. (2001), Weber, W.A. et al. (1986).

513. *Ramalina camptospora* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Pinzón, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2007).

514. *Ramalina complanata* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Ramalina indica* auct. non Fr., *Ramalina subasperata* auct. non Nyl., *Ramalina interponens* auct. non Nyl., *Ramalina subfraxinea* auct. non Nyl., fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2007), Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Weber, W.A. et al. (1981), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

515. *Ramalina darwiniana* var. *curvida* Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: Ecuador, Galapagos, Santa Cruz Island, Puerto Ayora, near the Charles Darwin Research Station, 0°44'32"S, 90°18'10"W, alt. 5 m, on twigs of coastal shrubs, 24 May 2005, A. Aptroot 63029 (CDS no. 29757—holotype; ABL—isotype).

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Floreana, Isabela, Santa Cruz.

**References:** Aptroot, A. et al. (2007).

516. *Ramalina darwiniana* var. *darwiniana* Aptroot & Bungartz

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: ECUADOR, Galapagos, Plaza Sur Island, 0°34'59"S, 90°9'54"W, alt. 1 m, coastal zone; eastern part with scattered and low vegetation of *Sesuvium portulacastrum* & *Tiquilia galapagoa* with occasional *Opuntia*, western part also with scattered shrubs of *Grabowskia boerhaaviaefolia*, *Maytenus octogona*, and *Castela galapageia*, on wood, twig, 21-Feb-2006, A. Aptroot, 64433 (CDS no. 31001—holotype; ABL—isotype).

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2007).

517. *Ramalina fragilis* Aptroot & Bungartz

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Niebla* sp. nov. ined.; Typus: ECUADOR, Galapagos, San Cristóbal, near Tortugueria Cerro Colorado, on lava cliff, 130 m alt., 2 June 2005, A. Aptroot 63419 (CDS 30174—holotypus; ABL—isotypus).

**Origin:** Native, Endemic.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinzón, San Cristóbal, Santa Fé.

**References:** Aptroot, A. et al. (2007), Weber, W.A. et al. (1986).

518. *Ramalina furcellangulida* Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Typus: Ecuador, Galapagos, Isabela, Volcán Alcedo, highest cinder cone along the trail going up the east slope, on bark of *Bursera graveolens*, 250 m alt., 10 March 2006, A. Aptroot 65029 (CDS 31611—holotypus; ABL—isotypus).

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2007).

519. *Ramalina montagnei* De Not.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2007).

520. *Ramalina pacifica* Asah.

**Taxon status:** Taxonomic status unresolved or unrevised.



F. Bungartz: some specimens of *R. solediantha* with more flattened lobes may belong to this species.

**Origin:** No Data.

**IUCN Red List:** Not Evaluated.

**Galapagos Distribution:** Pinzón, San Cristóbal, Santa Cruz.

**References:** Aptroot, A. et al. (2007).

521. *Ramalina peruviana* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2007), Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

522. *Ramalina polyforma* Aptroot

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: Ecuador, Galapagos, Santa Cruz Island, on coastal lava cliffs E of Puerto Ayora near Charles Darwin Research Station, 20 m alt., 29 May 2005, A. Aptroot 63412 (CDS 30176—holotype; ABL—isotype).

**Origin:** Native, Endemic.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2007).

523. *Ramalina puiggarii* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Ramalina linearis*, fide Aptroot & Bungartz (2007)

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Española, Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2007), Dodge, C.W. et al. (1935), Dodge, C.W. et al. (1936), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

524. *Ramalina sideriza* Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2007).

525. *Ramalina solediantha* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé,

Santiago.

**References:** Aptroot, A. et al. (2007), Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

526. *Ramalina solediosa* (B. de Lesd.) Landrón

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Ramalina furcellata*, fide Aptroot & Bungartz (2007); In Stewart (1912) & Weber (1966, 1981) as *Ramalina farinacea*; In Dodge (1936) & Weber (1966) as *Ramalina dasypoga*

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2007), Dodge, C.W. et al. (1936), Kashiwadani, H. et al. (1993), Landrón C.I. et al. (1972), Stewart, A. et al. (1912), Weber, W.A. et al. (1981), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

527. *Ramalina usnea* (L.) R. Howe

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Stewart (1912) and Linder (1934) as *Alectoria sarmentosa*, fide Weber (1966)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2007), Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Linder, D.H. et al. (1934), Stewart, A. et al. (1912), Weber, W.A. et al. (1981), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

528. *Ramboldia heterocarpa* (Fée) Kalb, Lumbsch & Elix

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

529. *Ramonia valenzueliana* (Mont.) Stizenb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

530. *Redonographa galapagoensis* Bungartz & Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: ECUADOR. Galapagos: Santiago Island, ca. 5 km inland from the E-coast; 0° 16' S, 90° 37' W; Bungartz 5208 (CDS 29421, holotype); previously reported as *Carbacanthographis saxiseda* (Bungartz et al., 2010) but was found to represent an undescribed taxon (Lücking et al. 2013).

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Unknown.

**References:** Bungartz, F. et al. (2009), Elix, J.A. et al. (1998), Lücking, R. et al. (2103), Weber, W.A. et al. (1993).

531. *Redonographa saxorum* (Egea & Torrente) Lücking & Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Graphis saxorum*, *Carbacanthographis saxorum*.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Unknown.

**References:** Bungartz, F. et al. (2009), Lücking, R. et al. (2103).

532. *Rhizoplaca minarum* Kalb, Elix & Bungartz ined.

**Taxon status:** Unpublished name (Nomen nudum).

**Origin:** Native, Questionable Endemic.

**Galapagos Distribution:** Isabela, Santiago.

533. *Rinodina lepida* (Nyl.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Isabela.

534. *Rinodina olea* Bagl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Specimen of '*Buellia myriocarpa*' FH 1108 (00197447) identified by J.W. Sheard, 2009 as *R. olea*.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

535. *Roccella albida* Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Holotype Tehler 8653 (CDS 40614)

**Origin:** Native, Endemic.

**IUCN Red List:** Endangered.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Tehler, A. et al. (2009).

536. *Roccella galapagoensis* Follmann

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Roccella geniculata*, *R. glebaria*, *R. obscurissima* Follmann & B. Werner, *R. geniculata* Follmann & B. Werner, *R. fusca* B. Werner nom. nud., *R. glebaria* B. Werner & Follmann nom. nud., *R. colonii* Follmann, *R. capitata* Follmann nom. nud., fide Tehler et al. (2009); Holotype: Galápagos, South Plaza Island, abundant on seaward vertical sides of boulders on highest points (S side), ca. 50 ft elev., 1964, W.A. Weber L-39130, Lichenes Exsiccati no. 112; Isotypes: COLO-184895, 186050, UPS, M-0024655, H, S-L21409

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Schofield, E.K. et al. (1984), Tehler, A. et al. (2009), Tehler, A. et al. (2007), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

537. *Roccella gracilis* Bory

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Roccella babingtonii*, *R. peruensis*, *R. difficilis*, fide Tehler (2002) and Tehler et al. (2009)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Darbishire, O.V. et al. (1935), Dodge, C.W. et al. (1935), Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Tehler, A. et al. (2009), Tehler, A. et al. (2002), Weber, W.A. et al. (1981), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

538. *Roccella margaritifera* B. Werner & Follmann

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Roccella octopodioides* nom. nud., *Roccella margaritifera* f. *octopodioides* fide Tehler et al. (2009);

Holotype: Galápagos, San Cristóbal Island, Lobería Pto. Baquerizo, 1991, Sánchez-Pinto 6616 (B-128629), TFMC

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Genovesa, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Tehler, A. et al. (2009), Tehler, A. et al. (2007).

539. *Roccella nigerrima* (Darb.) Follmann

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Roccelloidea nigerrima*, *Roccella translucida* Follmann & B. Werner, *Roccella incurvata* B. Werner, *Roccella kappeniana* Follmann & B. Werner, *Roccella botrytis* B. Werner nom. nud., *Roccella floribrassica* B. Werner nom. nud., *Roccella stipitata* B. Werner & Follmann nom. nud., *Roccella floteana* Follmann nom. nud., *Roccella floreana* B. Werner nom. nud. fide Tehler et al. (2009); Lectotype selected by Tehler (2007): Galápagos Islands, 1872, Hill s.n. (FH)

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Tehler, A. et al. (2009).

540. *Roccellographa circumscripta* (Taylor) Ertz & Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Sclerophytonomyces circumscripti* Cif. & Tomas.; *Sclerophyton cricumscriptum* (Taylor) Zahlbr., *Peterjamesia circumscripta* (Taylor) D. Hawksw.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Unknown.

**References:** Aptroot, A. et al. (2008), Ertz, D. et al. (2010).

541. *Sarcographa medusulina* (Nyl.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

542. *Sarcographa ramificans* (Kremp.) Staiger

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Bungartz, F. et al. (2009).

543. *Sarcographa tricola* (Ach.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

544. *Schismatomma spierii* Aptroot & Sparrius

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: ECUADOR. Galapagos: Isabela Island, Cerro Alcedo, highest cinder cone along the trail going up the E slope, 0° 23'37"S, 91°01'31"W, 250 m, arid lowlands with basalt outcrops, at the bottom scattered *Bursera graveolens* trees and shrubs of *Castela galapageia*, on bark of *Bursera graveolens*, 10 Mar 2006, Aptroot 65014 (holotype CDS 31595; isotype ABL).

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

545. *Schistophoron tenue* Stirt.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Pinta, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Tehler, A. et al. (2009), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

546. *Schistophoron variabile* Tibell

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Regionally Extinct.

**Galapagos Distribution:** Española, Floreana, Santa Cruz.

547. *Sclerococcum sp. 1*

**Taxon status:** Taxon not identified to species, subspecies, form or variety.

Index Fungorum: anamorphic Pezizomycotina

**Origin:** No Data.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

548. *Sclerophyton murex* Egea & Torrente ex Sparrius

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2008).

549. *Sclerophyton vertex* Sparrius

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2008).

550. *Sigridea leptothallina* (Malme) Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

The spelling in Index Fungorum is incorrect, the correct name is *Sigridea leptothallina* [Tehler, A. 1993. The genus *Sigridea* [Roccellaceae, Arthoniales, Euascomycetes. *Nova Hedwigia* 57(3-4): 417-435]

**Origin:** Native, Indigenous.

**IUCN Red List:** Vulnerable.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Fé.

**References:** Aptroot, A. et al. (2008).

551. *Sphinctrina leucopoda s.l.* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Sphinctrina podocarpa*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Fé.

552. *Sphinctrina tubiformis* A. Massal.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Index Fungorum as *Sphinctrina tubiformis*

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, Santiago.

553. *Spilonema revertens* Nyl.

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

554. *Sporopodium aff. phyllocharis* (Mont.) A. Massal.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

555. *Sporopodium leprieurii* Mont.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

556. *Staurothele lecideoides* B. de Lesd.

**Taxon status:** Identification not yet confirmed.

material examined by Breuss, morphologically identical to *S. lecideoides*, but no mature perithecia found, perithecia contain hymenial algae

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

557. *Stereocaulon azulense* Yoshim. & W.A. Weber

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Marchena, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

558. *Stereocaulon microcarpum* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

559. *Stereocaulon weberi* I.M. Lamb

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Holotype in FH

**Origin:** Native, Endemic.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

**References:** Lamb, I.M. et al. (1977), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

560. *Sticta beauvoisii* Delise

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Kirk, P. (ed.) et al. (2010), McDonald, T. et al. (2003).

561. *Sticta carolinensis* T. McDonald

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010), McDonald, T. et al. (2003).

562. *Sticta damicornis* (Sw.) Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Index Fungorum: the species epithet was originally published as 'damaecornis'.

**Origin:** Native, Indigenous.

**IUCN Red List:** Critically Endangered.

**Galapagos Distribution:** Santa Cruz.

563. *Sticta dichotoma* s.l. Delise

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1966).

564. *Sticta fuliginosa* (Dicks.) Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), McDonald, T. et al. (2003), Weber, W.A. et al. (1986).

565. *Sticta weigeli* (Ach.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Stewart (1912) as *Sticta quercizans*, fide Weber (1966); In Weber (1966) as *Sticta weigeli* var. *peruviana*;

Syn.: *Sticta quercizans*, fide Elix & McCarthy (1998), *Stictina quercizans*, fide Index Fungorum



**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Svenson, H.K. et al. (1935), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

566. *Strigula cf. obtecta* (Vain.) R. C. Harris

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela, Santa Cruz.

567. *Strigula microspora* Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

568. *Strigula nitidula* Mont.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Specimen in COLO: Santa Cruz: on leaves of *Eugenia jambos*, along trail to Horneman place just above Bellavista, 64131 p.p. (with *Byssoloma subdiscordans*), det. Vezda; F. Bungartz: specimen not seen!

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

569. *Strigula phaea* (Ach.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

570. *Strigula phyllogena* (Müll. Arg.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** No Data.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

571. *Strigula smaragdula* Fr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz & R. Miranda: specimen material identified by R. Lücking very poor.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

572. *Strigula subtilissima* (Fée) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Specimen in COLO: Santa Cruz: on leaves of *Eugenia jambos*, along trail to Horneman place just above Bellavista, 64131 p.p. (with *Byssoloma subdiscordans*), det. Vezda, F. Bungartz: specimen not seen!

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

573. *Strigula viridiseda* (Nyl.) R.C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal.

**References:** Kirk, P. (ed.) et al. (2010).

574. *Synalissa mattogrossensis* (Malme) Henssen

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
material confirmed by M. Schultz

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Española, Santa Cruz, Santiago.

575. *Syncesia farinacea* (Fée) Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Chiodecton farinaceum*

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, Pinzón, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2008).

576. *Syncesia graphica* (Fr.) Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Chiodecton myrticola*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2008), Weber, W.A. et al. (1986).

577. *Syncesia leprobola* Nyl. ex Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Chiodecton farinaceum*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Aptroot, A. et al. (2008), Weber, W.A. et al. (1986).

578. *Syncesia psaroleuca* (Nyl.) Tehler

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Chiodecton effusum*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Aptroot, A. et al. (2008), Weber, W.A. et al. (1986).

579. *Taeniolella sp. 1*

**Taxon status:** Taxon not identified to species, subspecies, form or variety.

Index Fungorum: anamorphic *Glyphium*

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santa Cruz.

580. *Tapellaria epiphylla* (Müll. Arg.) R. Sant.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

581. *Tapellaria granulosa* Lücking & Rivas Plata

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

582. *Tapellaria malmei* R. Sant.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

583. *Tapellaria nana* (Fée) R. Sant.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

584. *Tapellaria nigrata* (Müll. Arg.) R. Sant.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** San Cristóbal, Santa Cruz.  
**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).
585. *Tapellaria phyllophila* (Stirt.) R. Sant.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Data Deficient.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).
586. *Teloschistes chrysophthalmus* (L.) Th. Fr.  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Vulnerable.  
**Galapagos Distribution:** Isabela.
587. *Teloschistes flavicans* (Sw.) Norman  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Española, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago, Wolf.  
**References:** Dodge, C.W. et al. (1936), Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Weber, W.A. et al. (1981), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).
588. *Tephromela rhizophorae* Kalb  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Least Concern.  
**Galapagos Distribution:** Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Kalb, K. et al. (2008).
589. *Tephromela weberi* Kalb, Aptroot & Bungartz ined.  
**Taxon status:** Unpublished name (Nomen nudum).  
**Origin:** No Data.  
**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santiago.
590. *Thallocoma cinnabarinum* (Fée) Staiger  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Indigenous.  
**IUCN Red List:** Endangered.

**Galapagos Distribution:** Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Bungartz, F. et al. (2009).

591. *Thamnolia vermicularis* (Sw.) Ach. ex Schaer.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

592. *Thelenella inductula* (Nyl.) H. Mayrhofer

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

593. *Thelenella muscorum* (Fr.) Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

594. *Thelenella sastreana* R. C. Harris

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

595. *Thelopsis isiaca* Stitzenb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

596. *Thelopsis rubella* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

597. *Thelotrema monosporum* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela.

**References:** Kirk, P. (ed.) et al. (2010).

598. *Thelotrema pachysporum* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

599. *Trapelia coarctata* (Turner ex Sm.) M. Choisy

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

600. *Trapelia involuta* (Taylor) Hertel

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

601. *Trapelia placodioides* Coppins & P. James

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.

602. *Trapeliopsis flexuosa* (Fr.) Coppins & P. James

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santiago.

603. *Trapeliopsis glaucopholis* (Nyl.) Printzen & McCune

**Taxon status:** Identification not yet confirmed.

F. Bungartz: material needs verification

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

604. *Trapeliopsis granulosa* (Hoffm.) Lumbsch

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Lecidea granulosa*, fide Elix & McCarthy (1998); specimen in COLO (63337), Santa Cruz, on plant debris, saddle between El Puntudo and Cerro Crocker, 700 m

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

605. *Tricharia melanothrix* Fée

**Taxon status:** Identification not yet confirmed.

F. Bungartz: foliculous specimens in COLO det. as *T. melanothrix* need revision.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

606. *Tricharia vainioi* R. Sant.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

607. *Trichothelium epiphyllum* Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

608. *Trichothelium montanum f. montanum* Lücking

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

609. *Trypethelium aeneum* (Eschw.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: material needs verification

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Isabela, Pinzón, Santiago.

610. *Trypethelium aff. marcidum* (Fée) Müll. Arg.

**Taxon status:** Taxonomic status unresolved or unrevised.

F. Bungartz & R. Miranda: specimens with different chemistry and spore size from *T. marcidum* s.str.

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

611. *Trypethelium eluteriae* Spreng.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

F. Bungartz: specimens confirmed by R. Miranda & R. Lücking

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

612. *Trypethelium nitidiusculum* (Nyl.) R.C. Harris

**Taxon status:** Taxonomic status unresolved or unrevised.

F. Bungartz & R. Miranda: According to Harris (1995) *Trypethelium ochroleucum* and *Astrothelium variosolum* are identical in all characters but their stromata formation; *Trypethelium nitidiusculum* is identical to *Trypethelium ochroleucum* in all characters but the presence of lichexanthone. It is possible that all three taxa refer to one variable species only.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Pinta, Pinzón, Santa Cruz.

**References:** Harris, R.C. et al. (1995).

613. *Trypethelium ochroleucum* (Eschw.) Nyl.

**Taxon status:** Taxonomic status unresolved or unrevised.

F. Bungartz & R. Miranda: According to Harris (1995) *Trypethelium ochroleucum* and *Astrothelium variosolum* are identical in all characters but their stromata formation; *Trypethelium nitidiusculum* is identical to *Trypethelium ochroleucum* in all characters but the presence of lichexanthone. It is possible that all three taxa refer to one variable species only.

**Origin:** No Data.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Harris, R.C. et al. (1995), Weber, W.A. et al. (1986).

614. *Trypethelium tropicum* (Ach.) Müll. Arg.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

615. *Tylophorella pyrenocarpoides* (Müll. Arg.) Egea

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz, Santa Fé.

616. *Tylophoron cf. protrudens* Nyl.

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

F. Bungartz: Identification problematic; specimens need TLC, spot tests: C+ red, but UV-

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Pinta, Santa Cruz, Santiago.

617. *Tylophoron galapagoense* Bungartz, Ertz, Diederich & Tibell

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Holotype Ertz 11794 (CDS 37153)

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, Pinzón, Santa Cruz, Santiago.



**References:** Ertz, D. et al. (2011).

618. *Tylophoron hibernicum* (D. Hawksw., Coppins & P. James) Ertz, Diederich, Bungartz & Tibell

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Blarneya hibernica* D. Hawksw., Coppins & P. James

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Fernandina, San Cristóbal, Santa Cruz, Santiago.

**References:** Ertz, D. et al. (2011).

619. *Tylophoron moderatum* Nyl.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

620. *Usnea angulata* Ach.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1981, 1986) and Elix & McCarthy (1998) as *Usnea paradoxa*; no recent specimens; all collections from before 1972, presumed extinct!

**Origin:** Native, Indigenous.

**IUCN Red List:** Regionally Extinct.

**Galapagos Distribution:** Santa Cruz.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1981), Weber, W.A. et al. (1986).

621. *Usnea baileyi* (Stirt.) Zahlbr.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) as *Usnea antillarum*, fide A. Aptroot (pers. comm.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Fernandina, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

622. *Usnea brattiae* P. Clerc

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

623. *Usnea cf. bornmuelleri* J. Steiner

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Not Evaluated.

**Galapagos Distribution:** Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz.

624. *Usnea cirrosa (classical)* Motyka

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz.

625. *Usnea cirrosa (hirta-cirrosa)* Motyka

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santiago.

626. *Usnea columbiana* Motyka

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

627. *Usnea cornuta* Körb.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz, Santiago.

628. *Usnea dorogawensis* Asahina

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: JAPAN. Honshu: Prov. Yamato, Dorogawa, Amakawa-mura, Yoshino-gun, 1952, Togashi (lectotype TNS!; % C/M/A: 4/37.5/16; contains usnic, lobaric, norstictic, stictic and constictic acids, unknown US6 (Ohmura 2001).

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Ohmura, Y. et al. (2001), Truong, C. et al. (2011).

629. *Usnea erinacea* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Floreana, Pinzón.

**References:** Clerc, P. et al. (2008), Clerc, P. et al. (2011), Truong, C. et al. (2011).

630. *Usnea galapagona* Truong & P.Clerc

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: Ecuador. Galapagos: Isla San Cristóbal, Cerro Mundo, at the top of the rock cliffs on the S side close to the summit, 00°53'S, 89°34'W, 282 m, transition zone with *Bursera graveolens*, *Croton scouleri* and

Jasminocereus thouarsii, on Jasminocereus thouarsii on the ridge, August 2008, Clerc & Truong 08-405(holotype CDS, isotypes G, CMA: 16/3/61.5; chemistry: usnic acid, unknown medullary metabolite reacting UV+ green after charring).

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinta, San Cristóbal, Santa Cruz.

**References:** Herrera-Campos, M. et al. (1998), Lumbsch, H.T. et al. (2010).

631. *Usnea grandisora* Truong & P. Clerc

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Type: ECUADOR. Galapagos: Santa Cruz Island, above Mina Granillo, 607 m, upper transition zone, on branches of Scalesia, Truong 1122 (holotype CDS 39433, isotypes G, UPS; % C/M/A: 11/20.5/38. Chemistry: usnic, salazinic, galbinic and norstictic acids.)

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Ohmura, Y. et al. (2010), Swinscow, T. et al. (1979), Truong, C. et al. (2011).

632. *Usnea hirta* ssp. *trachista* (Motyka) P. Clerc

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal.

633. *Usnea mexicana* Vain.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Erronously reported as *Usnea longissima*, *U. amabilis* or *U. arthroclada* by Farlow (1902), Stewart (1912), Weber (1966, 1986), Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Floreana, Isabela, Pinta, Pinzón, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Stewart, A. et al. (1912), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

634. *Usnea parvula* Motyka

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela.

635. *Usnea poliotrix* Kremp.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

**References:** Motyka, J. et al. (1936–38), Truong, C. et al. (2011), Vareschi, V. et al. (1973).

636. *Usnea rubicunda* Stirt.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Usnea rubiginosa*, fide Elix & McCarthy (1998), *U. rubiginosa*, fide Index Fungorum; In Farlow (1902), Stewart (1912) and Weber (1966) as *Usnea ceratina*; Type: ENGLAND: 1879, Holmes (holotype BM!; contains usnic, stictic, constictic, menegazziaic and norstictic acids.).

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Clerc, P. et al. (2008), Elix, J.A. et al. (1998), Farlow, W.G. et al. (1902), Ohmura, Y. et al. (2008), Ohmura, Y. et al. (2001), Stewart, A. et al. (1912), Truong, C. et al. (2011), Weber, W.A. et al. (1966), Weber, W.A. et al. (1986).

637. *Usnea subcornuta* Stirt.

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Pinzón, San Cristóbal, Santa Cruz.

638. *Usnea subdasaea* Truong & P. Clerc

**Taxon status:** Unpublished name (Nomen nudum).

Type: Ecuador. Galapagos, Isabela, road to Sierra Negra crater, close to la Esperanza, 306 m, farming areas in the humid zone, living fencepost (still with bark) Truong 1194 (holotype CDS 39505, isotypes G, UPS; % C/M/A: 5/30/30. contains usnic, salazinic, galbinic, norstictic acids.)

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

**References:** Clerc, P. et al. (2008), Herrera-Campos, M. et al. (2001), Truong, C. et al. (2011).

639. *Usnea subscabrosa* Nyl. ex Motyka

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, Santa Cruz.

640. *Vainionora sp. nov.*

**Taxon status:** Unpublished name (Nomen nudum).

**Origin:** Native, Endemic.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santa Cruz.

641. *Verrucaria cf. pinguicula* A. Massal.

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santa Cruz.

642. *Verrucaria lecideoides* (A. Massal.) Gueidan & C. Roux

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Santiago.

643. *Verrucaria polysticta* Borrer

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Isabela, Santiago.

644. *Verrucaria xyloxena* Norman

**Taxon status:** Accepted name; taxon occurs in Galapagos.  
material confirmed by O. Breuss (2011)

**Origin:** No Data.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal.

645. *Vouauxiomyces sp. 1*

**Taxon status:** Taxon not identified to species, subspecies, form or variety.

Index Fungorum: anamorphic Abrothallus (Pezizomycotina)

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Kirk, P. (ed.) et al. (2010).

646. *Xanthomendoza weberi* (S.Y. Kondr. & Kärnefelt) L. Lindblom

**Taxon status:** Accepted name; taxon occurs in Galapagos.

In Weber (1986) and Elix & McCarthy (1998) as *Xanthoria candelaria*, fide F. Bungartz annotations, 2006

**Origin:** Native, Indigenous.

**IUCN Red List:** Near Threatened.

**Galapagos Distribution:** Isabela, Santa Cruz, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

647. *Xanthoparmelia congensis* (J. Steiner) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

648. *Xanthoparmelia subramigera* (Gyeln.) Hale

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Parmelia subramigera*, fide Elix & McCarthy (1998)

**Origin:** Native, Indigenous.

**IUCN Red List:** Least Concern.

**Galapagos Distribution:** Española, Floreana, Isabela, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Elix, J.A. et al. (1998), Weber, W.A. et al. (1986).

649. *Xylographa parallela* (Ach.) Fr.

**Taxon status:** Identification not yet confirmed.

F. Bungartz: possibly misidentifications of *Pyrenographa irregularis* (Wehm.) R.C. Harris

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

650. *Xylographa vitiligo* (Ach.) J.R. Laundon

**Taxon status:** Identification not yet confirmed.

F. Bungartz: possibly misidentifications of *Pyrenographa irregularis* (Wehm.) R.C. Harris

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

651. *cf. Baflavia flavescens* (Lücking) Lücking

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

F. Bungartz: material most likely belongs to an undescribed *Eugeniella*

**Origin:** No Data.

**Galapagos Distribution:** Floreana, Santa Cruz.

652. *cf. Nadvornikia sp.*

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

**Origin:** No Data.

**Galapagos Distribution:** Pinta.

## Rejected taxa

1. *Acarospora cf. fuscata* (Nyl.) Arnold

F. Bungartz: material previously identified as *A. cf. fuscata* has been annotated by K. Knudsen as *A. sparsiuscula*.

2. *Acarospora citrina* (Taylor) Zahlbr.

Misidentification for *A. chrysops*, fide K. Knudsen (pers. comm., 2007)

3. *Acarospora schleicheri* (Ach.) A. Massal.

Misidentification for *A. chrysops*, fide K. Knudsen (pers. comm., 2007)

4. *Acarospora thelococcoides* (Nyl.) Zahlbr.

F. Bungartz: the only specimen identified by Aptroot (Aptroot 64834) as *A. thelococcoides* is *A. americana* according to K. Knudsen.

5. *Alectoria sarmentosa* (Ach.) Ach.

Misidentifications of *Ramalina usnea*, fide Weber (1966) & fide F. Bungartz annotations, 2009

6. *Anisomeridium anisolobum* (Müll. Arg.) Aptroot  
F. Bungartz & R. Miranda: probably all misidentifications of *A. leptospermum*; Syn.: *Ditremis anisoloba*, fide Elix & McCarthy (1998); one specimen in COLO has not yet been revised (L-40404) det. Aptroot, 1991
7. *Arthonia parantillarum* Aptroot  
Misidentifications of *A. antillarum*, fide Bungartz (2010)
8. *Arthopyrenia punctiformis* A. Massal.  
F. Bungartz & R. Miranda: specimens previously cited as *A. punctiformis* are based on misidentifications.
9. *Arthothelium spilomatoides* (Nyl.) Zahlbr.  
Misidentification of *Arthothelium galapagoense*, fide Weber (1981)
10. *Aspidothelium fugiens* (Müll. Arg.) R. Sant.  
F. Bungartz: in Weber (1986) erroneously cited as *Aspidophyllum fugiens*; material Weber 285 (L-40433). The material was originally determined by Vezda, but with publication of Lücking (2008) the species concept has change; the Galapagos specimens has perithecia with disk-like, dentate expansion and not setae or hairs and thus belongs to *A. scutellarpum*
11. *Buellia xanthinula* (Müll. Arg.) Malme  
Misidentification of *Buellia straminea*, fide Weber (1986): 488; misidentification of *Buellia flavoareolata*, fide F. Bungartz annotations, 2009
12. *Bulbothrix goebelii* (Zenker) Hale  
M. Benatti, A. Spielmann & F. Bungartz: specimens previously identified as *B. goebelii* have isidia and thus don't belong to *B. goebelii*; most material belongs to *B. subdissecta*.
13. *Calicium abietinum* Pers.  
Misidentifications of *Chaenothecopsis* aff. *savonica* fide Tibell (2010)
14. *Calicium hyperelloides* Nyl.  
Possibly misidentifications of *C. robustellum* fide Tibell (2010)
15. *Caloplaca cirrochroa* (Ach.) Th. Fr.  
Syn.: *Placodium cirrochroum*; misidentifications of *C. cf. cupulifera* fide U. Søchting
16. *Caloplaca elegans* (Link) Th. Fr.  
Misidentifications of *Caloplaca isidiosa* fide U. Søchting, 2010
17. *Canoparmelia crozalsiana* (de Lesd.) Elix & Hale  
F. Bungartz: misidentifications, all specimens belong to *C. cf. raunkierii*
18. *Carbacanthographis saxiseda* (Zahlbr.) Bungartz  
F. Bungartz: all Galapagos specimens previously identified as *C. saxiseda* by Bungartz & Lücking (2009) belong to *Redonographa galapagoensis*; they were originally reported by Weber (1993) as *Graphina saxiseda* and Elix & McCarthy (1998) as *Graphis saxiseda*.
19. *Celothelium aciculiferum* (Nyl.) Vain.  
F. Bungartz & R. Miranda: misidentifications of *Celothelium dominicanum*.

20. *Chaenotheca brunneola* (Ach.) Müll. Arg.  
L. Tibell: *Chaenothecopsis savonica* s.l.
21. *Chiodecton myrticola* Feé  
Acc. name: *Syncesia myrticola*; Misidentification of *Syncesia psaroleuca*, fide F. Bungartz annotations, 2008
22. *Chrysothrix candelaris* (L.) J.R. Laundon  
Misidentification of *Chrysothrix xanthina*, fide A. Aptroot (pers. comm.)
23. *Cladonia coccifera* agg. (L.) Willd.  
F. Bungartz: misidentifications of *C. corymbosula*
24. *Cladonia furcata* f. *adpersa* (Flörke) Vain.  
F. Bungartz: most likely misidentifications of *C. sphacelata*
25. *Cladonia granulosa* (Vain.) Ahti  
F. Bungartz: one specimen [Bungartz 3272 (CDS 26911)] first identified by T. Ahti as *C. granulosa* (annotation 2010); later revised to *C. polyscypha* (annotation 2011)
26. *Cladonia macilentoides* Ahti & Fleig  
F. Bungartz & A. Yáñez: misidentifications of *C. macilenta*
27. *Cladonia polycarpoides* Nyl.  
Syn.: *Cladonia subcariosa*, fide Elix & McCarthy (1998); Misidentification of *Cladonia* sp. nov., fide A. Aptroot (pers. comm.)
28. *Cladonia rangiferina* (L.) Weber ex F.H. Wigg.  
F. Bungartz: the report in Hooker (1847) is most certainly not the arctic alpine *C. rangiferina*, but a similar species of reindeer lichens, most likely *C. confusa* f. *bicolor*
29. *Cladonia rappii* A. Evans  
F. Bungartz: only one minute, fragmentary specimen in CDS (Aptroot 65573 B); originally identified by A. Aptroot as *C. rappii*, annotated by T. Ahti as *C. sp.* (probably undescribed, *C. aff. rappii*); however, the fragmentary minute material is extremely similar to basal squamules of *C. pulverulenta*, which also contains fumarprotocetraric acid, no typical material of *C. rappii* has been reported from Galapagos
30. *Cladonia subulata* (L.) Weber ex F.H. Wigg.  
F. Bungartz & A. Yáñez: specimen in COLO (63520): Isabela, Cerro Azul, det. Thomson is misidentification of *Cladonia corniculata*
31. *Cladonia symphoriza* Nyl.  
Misidentification of *Cladonia didyma*, fide F. Bungartz annotation, 2006
32. *Coccotrema colobinum* (Tuck.) Messuti  
F. Bungartz: The type specimen of *Pertusaria colobina* Tuck., later transferred by Messuti & Vobis (2002) and Messuti (2003) into *Coccotrema colobinum*, was supposedly collected by the Reverend T. Hill during the Hassler Expedition in Galapagos. Messuti & Vobis (2002) suggest that one of four specimens labelled (a) in the packet is material collected in Galapagos. It is, however, highly doubtful that any one of these four specimens was actually collected in the archipelago. Not a single specimen of that species has ever been found since. Instead, Messuti & Vobis (2002) cite two more specimens collected by Imshaugh & Ohlsson



(MSC 43340, MSC 44816) from the Chilean coast. It is therefore much more probable that the type material of this species, like so many other specimens collected by Reverend T. Hill during the Hassler Expedition, was actually mislabeled (previously the same was already suggested by Weber (1086) p. 490); A. Fryday examined the type from FH and observed: "The "Galapagos" collection has *C. coccophorum* (= *Lepolichen coccophorus*) on the same piece of bark, which makes the possibility that it is really from the Galapagos extremely unlikely. It was even annotated "probably from Str. of Magellan" by Rolf Santesson in 1955."

33. *Cryptothecia candida* (Kremp.) R. Sant.

F. Bungartz: all specimens previously identified as *C. candida* are UV+ bright orange and thus belong to *C. assimilis*

34. *Cryptothecia evergladensis* Seavey

F. Bungartz: misidentifications of a new species of *Cryptothecia*

35. *Cryptothecia punctosorediata* Sparrius

F. Bungartz: all material belongs to *C. striata*

36. *Dictyonema moorei* (Nyl.) A. Henss.

previous reports are based on misidentifications of material that belongs to *D. membranaceum* s.l.

37. *Diploschistes aeneus* (Müll. Arg.) Lumbsch

F. Bungartz: the material previously identified as *D. aeneus* contains only gyrophoric acid and is therefore *D. badius*

38. *Diploschistes hypoleucus* Zahlbr.

F. Bungartz: the material previously identified as *D. hypoleucus* contains lcanoric acid and belongs to *Diploschistes rampoddensis* (Nyl.) Zahlbr.

39. *Diploschistes scruposus* (Schreb.) Norman

Misidentification of *Diploschistes cinereocaesius*, fide F. Bungartz annotations, 2009

40. *Dirina herrei* Zahlbr.

Acc. name: *Dirina paradoxa* ssp. *approximata*; Misidentification of *Syncesia psaroleuca*, *S. graphica* and *Dirina catalinariae* f. *catalinariae*, fide F. Bungartz annotations, 2008; Type not seen: Floreana, Post Office Bay, on smooth bark, coll. Herre

41. *Dirinaria aspera* (H. Magn.) D.D. Awasthi

Syn.: *Physcia aspera*, fide Elix & McCarthy (1998); Misidentification of *Dirinaria applanata*, fide F. Bungartz annotation, 2008

42. *Everniastrum subplanum* Sipman

F. Bungartz: the only specimen in CDS was collected by Aptroot 63652 on the Teleferico, Quito, mainland Ecuador.

43. *Flavoparmelia baltimorensis* (Gyeln. & Főriss) Hale

F. Bungartz: misidentifications of *F. leucoxantha*; specimens do not have coarsely pustulate soredia, instead the soredia are mealy.

44. *Flavoparmelia caperata* (L.) Hale

F. Bungartz: misidentifications of *F. leucoxantha*.

45. *Graphina virginea* (Eschw.) Müll. Arg.  
Misidentification of *Diorygma poitaei*, fide Bungartz et al. (2009)
46. *Graphis chrysocarpa* (Raddi) Spreng.  
Syn.: *Phaeographina chrysocarpa*, fide A. Aptroot (pers. comm.); Misidentification of *Graphis subchrysocarpa*, fide Bungartz et al. (2009); specimens in COLO: Weber (L- 40405, L- 43952)
47. *Graphis desquamescens* Fée  
Misidentification of *Graphis adpressa* or *G. anfractuosa*, fide Bungartz et al. (2009)
48. *Graphis striatula* (Ach.) Spreng.  
Misidentification of *Graphis rimulosa*, fide Bungartz et al. (2009) and *Opegrapha graphidiza* s.l., fide F. Bungartz annotation, 2008
49. *Graphis subamylacea* Zahlbr.  
Misidentification of *Graphis intricata*, fide Bungartz et al. (2009)
50. *Haematomma puniceum* (Sw. ex Ach.) A. Massal.  
Syn.: *Lecanora punicea*; Misidentification of *Haematomma persoonii*, fide F. Bungartz annotations, 2008
51. *Herpothallon philippinum* (Vain.) Aptroot & Lücking  
F. Bungartz: Galapagos specimens previously reported as *Herpothallon philippinum* (i.e., the *Herpothallon* species cited by Aptroot et al. 2009 to have a partially I+ blue medulla) lack pseudisidia and have asci confined to ascigerous cushions; this material thus belongs to *Cryptothecia striata*.
52. *Heterodermia lepidota* Swinscow & Krog  
Misidentification of *Heterodermia antillarum*, fide F. Bungartz annot. 2006
53. *Hypotrachyna laevigata* (Sm.) Hale  
Specimens reported in previous versions of this online checklist as *H. laevigata* were examined with TLC by A. Yáñez; all Galapagos material contains alectoronic and alpha-colatolic acid and thus belongs to *H. explendens*.
54. *Julella fallaciosa* (Stizenb. ex Arnold) R.C. Harris
55. *Julella lactea* (A. Massal.) M.E. Barr
56. *Lecanographa illecebrosula* (Müll. Arg.) Egea & Torrente  
Misidentification of *Lecanographa microcarpella*, fide Bungartz annotations, 2008
57. *Lecanora conizaea* (Ach.) Nyl.  
in *Lichenes Exsiccati*, Colorado, No. 138, Weber (1981): Incorrect, but no alternative identification available; name also used in specimen FH 197184 by W.A. Weber, misidentification of *Lecanora floridula*, fide F. Bungartz annotation, 2009
58. *Lecanora glaucovirens* Tuck.  
Type: Hassler Expedition (FH), coll. Rev. T. Hill; Weber (1986: 489) doubts that this specimen was actually collected in Galapagos; F. Bungartz: the type specimen (FH-TUCK 197145) does not belong to *Lecanora* but to *Lecidea* s.l. and no similar material was ever collected again in the Galapagos.

59. *Lecanora helva* Stizenb.  
Misidentifications based on a confusion with the very similar *L. leprosa*, fide Bungartz annotations 2008; Guderley (1999) erroneously states that *L. helva* grows in association with the endemic *L. schindleri*, but all specimens he annotated are identified as *L. leprosa*, not *L. helva*.
60. *Lecanora orosthea* (Ach.) Ach.  
F. Bungartz: misidentifications of sterile *L. substrobilina*
61. *Lecanora subcoarctata* (C. Knight) Hertel  
F. Bungartz: Identification of the material by Hertel (1989) is incorrect, the record is based on a specimen of *L. avium*.
62. *Lecanora thysanophora* R.C. Harris  
F. Bungartz: misidentifications of *Herpothallon granulare*
63. *Lecidea flavoareolata* nom. nud.  
No author in Index Fungorum; Zahlbruckner's Cat. Lich. Univ. 7: 362; rejected by Weber (1966)
64. *Leprocaulon microscopicum* (Vill.) Gams  
Misidentification of *Leprocaulon tenellum*, fide F. Bungartz annot. 2009
65. *Leptogium isidiosellum* (Riddle) Sierk  
Misidentification, all Galapagos material belongs to *L. millegranum*, the lobes are fusing and the isidia are coarsely granular, fide Bungartz (2008)
66. *Leucodecton cf. desquamescens* (Vain.) Lücking  
F. Bungartz: the only specimen upon which this preliminary identification was based reacts K+ yellow to red; *L. desquamescens* does not contain secondary metabolites according to Rivaz-Plata et al. (2010).
67. *Lithothelium obtectum* (Müll. Arg.) Aptroot  
F. Bungartz & R. Miranda: misidentifications of *L. microsporium*; the "unpublished" Galapagos specimen cited by Aptroot (2006) is *L. microsporium*
68. *Lobaria dissecta* (Sw.) Raeusch.  
Misidentification of *Lobaria patinifera*, fide F. Bungartz annotations, 2008
69. *Megalospora tuberculosa* (Fée) Sipman  
reported in previous versions of this checklist, but later described as the new species: *Megalospora galapagoensis* Bungartz, Ziemmeck & Lücking
70. *Mycoporum pycnocarpoides* Müll. Arg.  
Misidentification of *M. compositum*, fide F. Bungartz annotations, 2011
71. *Niebla sp. nov. ined.*  
Described by Aptroot & Bungartz (2007) as *Ramalina fragilis*. The specimen mentioned by Weber (1986: 474) Sipman 63573 was not examined.
72. *Opegrapha graphidiza s.l.* Nyl.  
Acc. name: *Opegrapha cactacearum* s.str. fide D. Ertz 2010

73. *Parmeliella mariana* (Fr.) P.M. Jørg. & D.J. Galloway  
F. Bungartz: cited by Weber (1986) as *Pannaria pannosa*, a synonym of *P. mariana* according to Elix & McCarthy (1998) and Jørgensen & Galloway (1992, p. 275); the only known specimen (COLO (L-63501, Sipman L-26, Isabela, 21-Jun-1976) is, however, densely isidiate and thus refers to *Parmeliella stylophora* (Vain.) P.M. Jørg.
74. *Parmotrema hypotropum* (Nyl.) Hale  
A. Spielmann: reports are based on misidentifications of *Parmotrema grayanum* (Hue) Hale.
75. *Parmotrema neotropicum* Kurok.  
A. Spielmann: previous records erroneous
76. *Parmotrema peralbidum* (Hale) Hale  
Misidentification of *Canoparmelia crozalsiana*, fide F. Bungartz annotations, 2007; Syn.: *Parmelia peralbida*, fide Elix & McCarthy (1998)
77. *Peltigera didactyla* (With.) J.R. Laundon  
Syn.: *Peltigera erumpens*, fide Elix & McCarthy (1998); originally reported in Weber (1986) from Isabela (Sipman L-52) and Santa Cruz (L-40302, L-41144), the Santa Cruz specimens are not tomentose and thus misidentifications of *P. ulcerata* Müll. Arg.
78. *Phaeophyscia hispidula* (Ach.) Moberg  
Misidentification of *Hyperphyscia adglutinata*, fide A. Aptroot (pers. comm.)
79. *Phaeophyscia rubropulchra* (Degel.) Moberg  
F. Bungartz: previously erroneously identified, all specimens at CDS are *Hyperphyscia pandani* (H. Magn.) Moberg
80. *Phyllopsora corallina* (Eschw.) Müll. Arg.  
Specimen in COLO: misidentification of *Phyllopsora intermediella*
81. *Phyllopsora furfuracea* Zahlbr.  
Misidentifications of *P. intermediella*, fide Timdal 2010
82. *Physcia aipolia* (A. Massal.) Zahlbr.  
F. Bungartz: In Weber (1986) and Elix & McCarthy (1998) as *Physcia mexicana*, but this taxon is not included in Moberg (1990) *The lichen genus Physcia in Central and South America*. The Galapagos material has a medulla K+ yellow and therefore does not belong to *P. biziana* as which it previously has been misidentified. Intermittently the specimens were thus referred to *P. aipolia*. However, unlike *P. aipolia*, Galapagos specimens are much finer lobed and do not contain zeorin despite their K+ yellow medulla. The material is thus chemically distinct from *P. aipolia* s.str. and is therefore now treated as *P. again*, unless studies future of the type suggest otherwise.
83. *Physcia biziana* (A. Massal.) Zahlbr.  
Acc. Name: *Physcia aipolia*, in Weber (1986) and Elix & McCarthy (1998) as *Physcia mexicana*, fide A. Aptroot (pers. comm.); Galapagos material medulla K+ yellow!!!, F. Bungartz
84. *Physcia convexella* Moberg  
F. Bungartz: *P. convexella* was originally published based on a specimen from Cuzco, Peru at 2800 m altitude and it is very unlikely that Galapagos specimens that occur in the dry and coastal zone belong to this species.

The only CDS specimen identified by Moberg (UPS) as *P. convexella* (Aptroot 64468) has a K+ yellow medulla and thus does not agree with the description in Moberg (1990), which states that *P. convexella* is K-. The specimen is treated here as *P. mexicana*.

85. *Physcia lacinulata* Müll. Arg.

All specimens have a black lower side and thus belong to *P. lobulata*, fide F. Bungartz

86. *Placopsis cribellans* (Nyl.) Räsänen

Recorded by Lamb (1947) from the Hassler Expedition. Weber (1966: 196) was unable to find the specimen and agrees with P. James, that the material was not collected in Galapagos, since it is on quartzite.

87. *Placynthiella icmalea* (Ach.) Coppins & P. James

F. Bungartz: specimens have been annotated by M. Schultz as *Lecidopyrenopsis corticola* Vain.

88. *Polymeridium sulphurescens* (Müll. Arg.) R.C. Harris

F. Bungartz & R. Miranda: erroneous identification of *Pseudopyrenula diluta*.

89. *Porina chlorotica* (Ach.) Müll. Arg.

F. Bungartz & R. Miranda: previous reports based on misidentifications of *Strigula phaea*.

90. *Porina subinterstes* (Nyl.) Müll. Arg.

F. Bungartz & R. Miranda: The specimen (Bungartz 8758) originally annotated by R. Miranda as *P. subinterstes* has wart-shaped to hemispherical perithecia and thus belongs to *P. melanops*.

91. *Porina tetracerae* (Ach.) Müll. Arg.

In Elix & McCarthy (1998) erroneously cited from Galapagos (Weber 1993: 433), but the citation in Weber (1993) is from the Cocos Islands! Reports of the species in previous versions of this checklist were cited as "rejected"; one single specimen in CDS (Aptroot 64623) annotated by R. Lücking as *P. tetracerae* is extremely poorly developed and lacks perithecia; the specimen is treated here as *P. distans* (= *P. cf. conspersa*).

92. *Psoroglaena cubensis* Müll. Arg.

*Psoroglaena cubensis* auct. non Müll. Arg., fide Elix & McCarthy (1998) syn. of *Flakea papillata*; misidentification of *Peltula omphaliza*, fide F. Bungartz annotation, 2009 (FH 197404)

93. *Pyrenula acutalis* R.C. Harris

F. Bungartz & R. Miranda: all material previously identified as *P. acutalis* does not belong to that species.

94. *Pyrenula aff. septicollaris* (Eschw.) R.C. Harris

F. Bungartz & R. Miranda: misidentifications.

95. *Pyrenula cocoës* Müll. Arg.

F. Bungartz & R. Miranda: all previous reports based on misidentifications.

96. *Pyrenula cruentata* (Müll. Arg.) R.C. Harris

F. Bungartz & R. Miranda: all specimens belong to *P. cruenta*.

97. *Pyrenula globifera* (Eschw.) Aptroot

F. Bungartz & R. Miranda: previous reports based on misidentifications.

98. *Pyrenula pyrenuloides* (Mont.) R.C. Harris

COLO 192496 was identified by A. Aptroot as *P. pyrenuloides*, but is fide R. Miranda annot. 2010 refers to *P.*

thelomorpha

99. *Pyrrhospora russula* (Ach.) Hafellner  
F. Bungartz: All Galapagos material grows on rock, has a creamish white to yellowish thallus that conforms well with *P. sanguinolenta*.
100. *Pyrrhospora sanguinolenta* (Kremp.) Rambold & Hafellner  
F. Bungartz: all previous records based on misidentifications of *Ramboldia heterocarpa* (Fée) Kalb, Lumbsch & Elix
101. *Pyxine caesiopruinosa* (Tuck.) Imshaug  
Acc. name: *Pyxine subcinerea*, fide Elix & McCarthy (1998)
102. *Ramalina australiensis* Nyl.  
Misidentification of *Ramalina solediosa*, fide A. Aptroot (pers. comm.); Syn.: *Ramalina furcellata*, *Ramalina farinacea* auct. non Ach., *Ramalina dasypoga* auct. non Tuck.
103. *Ramalina denticulata* Nyl.  
Misidentification of *Ramalina aspera*, fide A. Aptroot (pers. comm.)
104. *Ramalina farinacea* (L.) Ach.  
Acc. name: *Ramalina australiensis*, fide Elix & McCarthy (1998) & misidentification of *Ramalina solediosa*, fide Aptroot (pers. comm.)
105. *Ramalina furcellata* (Mont.) Zahlbr.  
Acc. name: *Ramalina australiensis*, fide Elix & McCarthy (1998) & misidentification of *Ramalina solediosa*, fide Aptroot & Bungartz (2007)
106. *Ramalina linearis* R.H. Petersen & M. Zang  
Misidentification of *Ramalina puiggarii*, fide Aptroot & Bungartz (2007) and of *R. complanata* and *R. sideriza* (FH specimens), fide F. Bungartz annotations, 2009
107. *Roccella lirellina* (Darb.) M. Choisy  
Misidentification of *Roccella margaritifera* or *R. nigerrima* fide Tehler et al. (2009); initially presumed to occur in Galapagos (Tehler 2007), but later shown to be restricted to coastal Peru (Tehler et al. 2009). Syn: *Reinkella lirellina* Darb. fide Tehler et al. (2009)
108. *Roccella portentosa* (Mont.) Darb.  
Misidentification of various species in the *Roccella galapagoensis* agg., fide Tehler et al. (2009)
109. *Roccellina nigrocincta* Tehler  
Wrong reference therefore rejected by Aptroot & Sparrius (2008): Elix & McCarthy (1998: 253) referring to Tehler (1983: 61) who does not mention the species
110. *Sticta filix* (Sw.) Nyl.  
Misidentifications of *S. dichotoma* s.l.
111. *Sticta quercizans* Ach.  
Misidentification for *Sticta weigeli*, fide Weber (1966); Acc. name: *Sticta weigeli*, fide Elix & McCarthy (1998); Specimens in CAS: Isabela, Iguana Cove, Snodgrass & Heller; Floreana, A. Stewart No. 400; Santa Cruz, NW-side, A. Stewart No. 401

112. *Sticta sylvatica* (Huds.) Ach.  
Misidentification of *Sticta weigelii* and *Sticta fuliginosa*, fide F. Bungartz
113. *Syncesia effusa* (Fée) Tehler  
Syn.: *Chiodecton effusum*; F. Bungartz: all Galapagos specimens are misidentifications of *Cryptothecia assimilis*
114. *Syncesia flavescens* (Nyl.) Tehler  
F. Bungartz: all Galapagos specimens are misidentifications of *Cryptothecia assimilis*
115. *Teloschistes exilis* (Michx.) Vain.  
Probably based on misidentifications of *Teloschistes flavicans*, fide Bungartz, 2009
116. *Tephromela atra* (Huds.) Hafellner  
Syn.: *Lecanora atra*, fide Elix & McCarthy (1998); F. Bungartz & K. Kalb: all records previously identified as this species are misidentifications of *Tephromela rizophorae*
117. *Trypethelium refertum* Stirt.  
F. Bungartz: misidentification of *Anisomeridium tamarindi*
118. *Trypethelium tuberculosum* (Vain.) R.C. Harris  
Misidentifications of *T. aff. marcidum* fide annotations F. Bungartz & R. Miranda, 2011
119. *Usnea amabilis* Motyka  
Misidentification; Weber (1986: 493) states that *U. longissima* reported by Stewart (1912) is *U. amabilis*, both IDs are misidentifications of *Usnea mexicana*, fide P. Clerc, M. de los Angeles, C. Truong annotations, 2008
120. *Usnea antillarum* (Vain.) Zahlbr.  
Misidentification of various different *Usnea* spp., fide Clerc, P. annotations 2008
121. *Usnea arthroclada* Fée  
Probably misidentification of *Usnea mexicana*, fide F. Bungartz
122. *Usnea ceratina* Ach.  
Misidentification of *Usnea rubicunda*, fide Elix & McCarthy (1998)
123. *Usnea cladocarpa* Fée  
Misidentification of *Usnea* spp., fide P. Clerc, M. de los Angeles & C. Truong annotations, 2008
124. *Usnea dasypoga* (Ach.) Röhl.  
Misidentification of *Usnea cf. bornmuelleri* and *U. baileyi*, fide P. Clerc & C. Truong annotations, 2008
125. *Usnea longissima* Ach.  
Misidentification for *U. mexicana*, fide P. Clerc, C. Truong & M. de los Angeles Herrera Campos (pers. comm, 2008)
126. *Usnea mirabilis* Motyka  
Probably misidentifications of *Usnea rubicunda* fide C. Truong
127. *Usnea paradoxa* (Zahlbr.) Motyka  
Misidentification of *Usnea angulata*, fide P. Clerc & C. Truong annotations, 2008 & F. Bungartz, 2009 (FH 197301)

128. *Usnea plicata* (L.) Weber ex F.H. Wigg.  
Syn.: *Usnea dasygoga* var. *plicata*; According to Weber (1986: 493) "reported on the basis of scrappy specimens collected by J.H. Andersson and Charles Darwin" which do not resemble *U. plicata*.
129. *Usnea rubiginea* (Michaux) A. Massal.  
C. Truong: Galapagos specimens under the name *U. rubiginea* (Weber 1987) belonged to *U. erinacea*, *U. rubicunda* or *U. poliotrix*; this taxon cited by Weber is listed in Elix & McCarthy (1998) as *Usnea rubicunda*.
130. *Verrucaria inficiens* Breuss  
F. Bungartz: material initially identified by O. Breuss, later revised to *V. lecideoides*
131. *Xanthoparmelia microspora* (Müll. Arg.) Hale  
F. Bungartz & A. Spielmann: Nash, Gries & Elix (1995) cite a specimen of *Xanthoparmelia microspora* (COLO Weber L-62892) that was originally, in 1976, also identified by Hale as *X. microspora*. However, Hale in 1980 revised his identification to *Pseudoparmelia leucoxantha*, which was recombined into *Flavoparmelia leucoxantha*. The specimen does contain protocetraric acid, not salazinic acid and thus does not belong to *X. microspora*!
132. *Xanthoria candelaria* (L.) Th. Fr.  
Misidentification of *Xanthomendoza weberi*, fide F. Bungartz annotations, 2006
133. *Xanthoria cf. tenuiloba* L. Lindblom  
Misidentification of *Xanthomendoza weberi*, fide F. Bungartz annotations, 2006

### Acknowledgements

We are grateful for the financial report received for this project. Please refer to the website ([www.darwinfoundation.org/dazone/checklist/](http://www.darwinfoundation.org/dazone/checklist/)) for a detailed list of all our donors.

This checklist would not be possible without adjunct and collaborating scientists, and volunteers of the Charles Darwin Foundation. The following scientists and volunteers have contributed to the CDF Checklist of Galapagos Lichenized Fungi: Teuvo Ahti, Rosa Batalles, Michel Benatti, Lenyn Betancourt C., Othmar Breuss, Philippe Clerc, Carolina Cornejo, Desiree Cruz, Manuela Dal Forno, Paul Diederich, Valeria Leonor Dután-Patiño, Damien Ertz, Tassilo Feuerer, Anne Guézou, Marusa Herrera, Georg Hillmann, Patricia Jaramillo Díaz, Harald Jonitz, Klaus Kalb, Kerry Knudsen, James Lawrey, Robert Lücking, Danilo Minga, Ricardo Miranda, Roland Moberg, Bibiana Moncado, Catalina Quintana, Eimy Rivaz-Plata, Matthias Schultz, Harrie Sipman, Adriano Spielman, Ulrik Söchting, Anders Tehler, Göran Thor, Leif Tibell, Einar Timdal, Camille Truong, Diego Villagómez, William A. Weber, Martin Westberg.

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#### Disclaimer

The Charles Darwin Foundation Galapagos Species Checklist is a continuously updated list of all species currently known from the Galapagos Islands and reflects up-to-date knowledge compiled by scientists of the Charles Darwin Foundation (CDF) in collaboration with experts from around the world. CDF shares this data publicly and invites comments, corrections and additions.

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