

Lichens of Eastern North America Exsiccati. Fascicle III, nos. 101-150

JAMES C. LENDEMER¹

ABSTRACT. - In conjunction with the preparator's work on the lichen flora of eastern North America the author began the distribution of this exsiccata (*Lichens of Eastern North America Exsiccati*) from the Academy of Natural Sciences of Philadelphia (PH). This, the third fascicle in the series comprises the nos. 101 to 150 and is distributed in 20 sets on exchange to the following herbaria: ASU, B, BG, CANB, CBM, CHR, DOV, FH, GZU, H, HMAS, M, MIN, S, TSB, TNS, TU, UPS, herb. Lendemer. The following changes are made to the North American checklist: *Agonimia opuntiella* (Buschardt & Poelt) Vězda is reported for the first time from North America; *Byssoloma pubescens* R.C. Harris is placed in synonymy with *B. meadii* (Tuckerman) Ekman; and *Placidium lacinulatum* var. *atrans* Breuss is described as new to science.

INTRODUCTION

This exsiccata was begun with the intent to distribute specimens of eastern North American lichens to herbaria worldwide in an effort to improve our general knowledge of the region. The first fascicle consisted primarily of specimens of Cladoniaceae collected with Samuel Hammer as part of an NSF grant to study the family. The second fascicle was not devoted to any specific group or region and instead was intended simply to distribute material from some of the areas to which I had access during that period. This, the third fascicle in the series comprises numbers 101-150 and too, is a result of my opportunities in the field in 2003 through 2004. This exsiccata is distributed on exchange to the following herbaria: ASU, B, BG, CANB, CBM, CHR, DOV, FH, GZU, H, HMAS, M, MIN, S, TSB, TNS, TU, UPS, herb. Lendemer. Distribution of incomplete sets remains as described previously by Lendemer (2003).

FASCICLE III

101. *Hypogymnia physodes* (L.) Nylander
Det. J.C. Lendemer – June 3, 2003

UNITED STATES OF AMERICA. PENNSYLVANIA. CARBON COUNTY.: On a dead tree along the north shore of Mud Run Creek, Mud Run Natural Area, Hickory Run State Park, ca. 1 ½ miles southwest of Albrightsville. – elev. ca. 1300 ft. - UTM 18 446059E 4539244N – Lat. 41° 00' 16"N, Long. 75° 38' 29"W – *Assoc. spp.:* *Flavoparmelia caperata*, *Punctelia rufecta*, *Parmelia squarrosa*, *Chromofulvea dialyta*, *Lecanora strobilina*, *Lepraria spp.*

Thallus corticolous, foliose, soraliolate; underside black, brown near lobe tips; soralia present on underside of lobe tips; lobes slightly inflated.

James C. Lendemer #863 & Erin Tripp

May 18, 2003

102. *Placidium lacinulatum* (Acharius) Breuss var. *atrans* var. *nov.*¹
Dup. Determined (W!) – O. Breuss – July 24, 2003

UNITED STATES OF AMERICA. MARYLAND. CECIL COUNTY.: On soil, in a serpentine barren with sparse grass, shrubby cover, and dead pine trees (*Pinus* sp.), on a hillside on the north/east shore of Conowingo Creek, several hundred yards east of Pilot Town Road (across from entrance to Girl Scout Camp), ca. ¾ mile southeast of Pilot, Pilot [Serpentine] Barrens, Nature Conservancy Property. – elev. ca. 300 ft. - UTM 18 397965E 4395175N – Lat. 39° 42' 08"N, Long. 76° 11' 25"W. – *Assoc. spp.:* *Psora icterica*.

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Thallus terricolous, squamulose, esorediate; squamules light to dark brown; perithecia immersed within squamules; perithecial walls dark; spores colorless, broadly ellipsoid, 8-per ascus.

James C. Lendemer #867

May 26, 2003

103. *Usnea strigosa* (Acharius) Eaton ssp. *major* (Michaux) I.I. Tavares

Det. J.C. Lendemer – June 4, 2003

Dup. Confirmed (UC!) – I.I. Tavares – June 14, 2003

UNITED STATES OF AMERICA. NEW JERSEY. CUMBERLAND COUNTY.: On a large tree, along NJ Route 555 several hundred yards south of intersection with Railroad Road, Bear Swamp East Natural Area, on the edge of a mixed pine (*Pinus* spp.) / oak (*Quercus*) forest, ca. 4 miles northeast of Newport, ca. 2 miles east of Paynters Crossing, < ½ mile east of Dividing Creek Station, Bear Swamp East Natural Area. – elev. 45 ft. - UTM 18 492354E 4350126N – Lat. 39° 18' 09"N, Long. 75° 05' 19"W – *Assoc. spp.: Flavoparmelia caperata, Punctelia rudecta.*

Thallus corticolous, short/shrubby, apotheciate, esorediate, gray-blue; apothecial disks yellow; apothecial cilia not inflated, uneven; fibrils slightly deformed, not inflated; base not blackened; medulla red.

James C. Lendemer *et al.* #868

April 13, 2003

w/ James A. Macklin & Gerry Moore

104. *Anaptychia palmulata* (Michaux) Vainio

Det. J.C. Lendemer – June 6, 2003

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On a large maple (*Acer* sp.), in a mixed hardwood forest along High Rocks Trail, ca. 1 mile from trail head, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1250 ft. - UTM 17 569651E 4228958N – Lat. 38° 12' 28"N, Long. 80° 12' 16"W – *Assoc. spp.: Biatora longispora, Heterodermia spp., Pertusaria spp.*

Thallus corticolous, foliose, esorediate, isidia lacking, lobules abundant, loosely attached to substrate.

James C. Lendemer #870 & Moira J. Moody

May 22, 2003

105. *Biatora longispora* (Degelius) Lendemer & Printzen

Det. J.C. Lendemer – June 6, 2003

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On the mossy bark of a tree on the edge of an old railroad grade, through a mixed hardwood forest, North Face Trail ca. 2 miles from intersection with Tea Creek Mountain Trail, north face of Tea Creek Mountain, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1200 ft. – UTM 17 569692E 4244116N - Lat. 38° 20' 39"N, Long. 80° 12' 09"W – *Assoc. spp.: Pertusaria spp., Cladonia sp.*

Thallus corticolous, crustose, blue-gray; apothecia biatorine, orange-yellow; spores ca. 8-per ascus, oblong, colorless, simple.

James C. Lendemer #871 & Moira J. Moody

May 23, 2003

106. *Biatora longispora* (Degelius) Lendemer & Printzen

Det. J.C. Lendemer – June 6, 2003

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On the mossy bark of a tree on the edge of an old railroad grade, through a mixed hardwood forest, North Face Trail ca. 1.5 miles from intersection with Tea Creek Mountain Trail, north face of Tea Creek Mountain, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1200 ft. – UTM 17 569692E 4244116N - Lat. 38° 20' 39"N, Long. 80° 12' 09"W – *Assoc. spp.: Pertusaria spp., Cladonia sp.*

Thallus corticolous, crustose, blue-gray; apothecia biatorine, orange-yellow; spores ca. 8-per ascus, oblong, colorless, simple.

James C. Lendemer #872 & Moira J. Moody

May 23, 2003

107. *Chrismofulvea dialyta* (Nylander) Marbach

Det. J.C. Lendemer – June 7, 2003

Dup. Confirmed (SZU!) – B. Marbach - June 20, 2003

UNITED STATES OF AMERICA. PENNSYLVANIA. CARBON COUNTY.: On a dead tree along the north shore of Mud Run Creek, Mud Run Natural Area, Hickory Run State Park, ca. 1 ½ miles southwest of Albrightsville. – elev. ca. 1300 ft. - UTM 18 446059E 4539244N – Lat. 41° 00' 16"N, Long. 75° 38' 29"W – *Assoc. spp.:* *Flavoparmelia caperata*, *Punctelia rudecta*, *Parmelia squarrosa*, *Lecanora strobilina*, *Lepraria spp.*

Thallus corticolous, crustose, white, thin to thick, UV-, KOH-; apothecia hemispherical, black, abundant; spores 8-per ascus, brown, 2-celled; hymenium colorless. *Lendemer 885* (ASU, FH, MIN, NDA, NY) is from the same locality however collected on a different tree on which *Hypogymnia physodes* also occurred. That collection has fewer, more dispersed apothecia and a thinner more dispersed thallus.

James C. Lendemer #884 & Erin Tripp

May 18, 2003

108. *Candelariella vitellina* (Hoffmann) Müll. Arg.

Dup. Determined (NY!) – Richard C. Harris – July 8, 2003

UNITED STATES OF AMERICA. MARYLAND. CECIL COUNTY.: On rock, in a serpentine barren with sparse grass and shrubby cover, and dead pine trees (*Pinus* sp.), on a hillside on the north/east shore of Conowingo Creek, several hundred yards east of Pilot Town Road (across from entrance to Girl Scout Camp), ca. ¾ mile southeast of Pilot, Pilot [Serpentine] Barrens, Nature Conservancy Property. – elev. ca. 300 ft. - UTM 18 397965E 4395175N – Lat. 39° 42' 08"N, Long. 76° 11' 25"W. – *Assoc. spp.:* *Caloplaca subsoluta*, *Caloplaca sp.*, *Buellia spuria*, *Xanthoparmelia somoensis*.

James C. Lendemer #891

May 26, 2003

109. *Heterodermia squamulosa* (Degelius) W.L. Culberson

Det. J.C. Lendemer – June 8, 2003

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On a large maple (*Acer* sp.), in a mixed hardwood forest along High Rocks Trail, ca. 1 mile from trail head, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1250 ft. - UTM 17 569651E 4228958N – Lat. 38° 12' 28"N, Long. 80° 12' 16"W – *Assoc. spp.:* *Punctelia appalachensis*, *Phaeophyscia rubropulchra*, *Biatora longispora*, *Pertusaria spp.*, *Pyxine sorediata*.

Thallus corticolous, foliose, esorediate; lobules abundant on lobe margins and sparse over lobe surface.

James C. Lendemer #896 & Moira J. Moody

May 22, 2003

110. *Punctelia appalachensis* (Culberson) Krog

Det. J.C. Lendemer – June 8, 2003

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On a large maple (*Acer* sp.), in a mixed hardwood forest along High Rocks Trail, ca. 1 mile from trail head, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1250 ft. - UTM 17 569651E 4228958N – Lat. 38° 12' 28"N, Long. 80° 12' 16"W – *Assoc. spp.:* *Phaeophyscia rubropulchra*, *Pertusaria spp.*, *Biatora longispora*, *Heterodermia appalachensis*, *Pyxine sorediata*.

Thallus corticolous, foliose, blue-gray/green, esorediate; lobules abundant; medulla white, C-; underside black with marginal brown zone.

James C. Lendemer #897 & Moira J. Moody

May 22, 2003

111. *Allocetraria oakesiana* (Tuckerman) Randle & Thell

Det. J.C. Lendemer – June 8, 2003

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On the bases of small birches (*Betula* sp.), along the south/east shore of Tea Creek, along Tea Creek Trail ca. ½ mile

from intersection with North Face Trail, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1000 ft. – UTM 17 567883E 4243954N - Lat. 38° 21' 33"N, Long. 80° 12' 37"W – *Assoc. spp.*: *Flavoparmelia caperata*, *Pyxine soorediata*, *Cladonia sp.*, *Graphis scripta*, *Biatora longispora*, *Pertusaria spp.*

Thallus corticolous, foliose, green, soorediate; soralia on lobe margins; apothecia rare, disks red/brown.

James C. Lendemer #898 & Moira J. Moody

May 23, 2003

112. *Cladonia verticillata* (Hoffmann) Schaerer

Det. J.C. Lendemer – June 9, 2003

Dup. Confirmed (H!) – T. Ahti – August 12, 2003

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On bryophytes and cushions of conifer needles, in a moist ridge-top conifer forest with little light, along Big Beechy Trail at intersection with District Line Trail, Sugar Creek Mountain, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1250 ft. - UTM 17 565363E – Lat. 38° 19' 15"N, Long. 80° 15' 08"W – *Assoc. spp.*: *Cladonia furcata*, *Cladonia squamosa*.

Thallus terricolous; primary squamules sparse, esorediate; cortex UV-, KOH-; podetia tall, cupped, esorediate, sparsely squamulose, proliferating from the center (and rarely from the margins); apothecia brown.

James C. Lendemer #899 & Moira J. Moody

May 21, 2003

113. *Cladonia submitis* A. Evans

Det. J.C. Lendemer – August 18, 2003

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On organic debris (mostly pine needles and bark), under a large dead pitch pine (*Pinus rigida*), in sandy barrens on the edge of a pine (*Pinus*) / oak (*Quercus*) forest, west of Chatsworth Lake, along NJ Route #532, ca. ¾ mile west of Chatsworth. – elev. ca. 90 ft. - UTM 18 538663E 4407083N – Lat. 39° 48' 53"N, Long. 74° 32' 54"W – *Cladonia cristatella*, *Cladonia floerkiana*, *Cladonia uncialis*, *Cladonia atlantica*, *Cladonia grayi*.

Thallus terricolous, forming low dissected cushions over ground, UV-; podetia coarse at base, much branched.

James C. Lendemer *et al.* #1114

July 31, 2003

w/ Sasha Eisenmen, Jinshaung Ma, James A. Macklin, and Gerry Moore

114. *Nadvornikia soorediata* R.C. Harris

Dup. Determined (NY!) - R.C. Harris – June 24, 2003

UNITED STATES OF AMERICA. NEW JERSEY. CUMBERLAND COUNTY.: On thin, loose bark of a small tree, in a swampy old-growth forest of *Liriodendron*, *Liquidambar*, *Quercus*, and *Acer rubrum* with a sparse *Vaccinium* / *Smilax* understory, along Nature Conservancy property boundary, Bear Swamp West, ca. 2 miles northeast of Newport. – elev. ca. 10 ft. - UTM 18 488493E 4349984N – Lat. 39° 18' 04"N, Long. 75° 08' 01"W – *Pertusaria multipunctoides*, *Fissurina insidiosa*, *Graphis scripta*, *Phaeographis inusta*.

Thallus corticolous, crustose, thin, green-gray, soraliate.

James C. Lendemer *et al.* #874

April 26, 2003

w/ Gerry Moore *et al.*

115. *Candelariella efflorescens* R.C. Harris & Buck

Det. J.C. Lendemer – June 25, 2003

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On mossy bark of oaks (*Quercus*), along an unnamed sand road, in an oak dominated pine (*Pinus rigida*, *Pinus spp.*) – oak (*Quercus*) forest, on the edge of an atlantic white cedar (*Chamaecyparis thysoides*) swamp, ¼ mile north of Quaker Bridge, Batsto Natural Area, Wharton State Forest. – elev. ca. 30 ft. - UTM 18 528615E 4395648N – Lat. 39° 42' 44"N, Long. 74° 39' 58"W – *Assoc. spp.*: *Heterodermia speciosa*, *Pyxine soorediata*, *Pertusaria paratuberculifera*, *Flavoparmelia caperata*, *Punctelia rufecta*, *Loxospora pustulata*, *Lecanora hybocarpa*.

Thallus corticolous, crustose, areolate; areoles breaking down into soredia, KOH-, UV-; apothecia sparse; epihymenium orange/brown, KOH-; hymenium colorless; ascospores >8-per ascus, colorless, obtuse-ellipsoid.

James C. Lendemer #967 & Leonard H. Smith II

June 23, 2003

116. *Candelariella efflorescens* R.C. Harris & Buck

Det. J.C. Lendemer – July 2, 2003

Dup. Confirmed (NY!) – R.C. Harris – July 24, 2003

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On the trunk of a large oak (*Quercus*) in an oak (*Quercus*) dominated pine (*Pinus*) / oak (*Quercus*) forest, at the intersection of three unnamed sand roads, Washington, Wharton State Forest. – elev. 15 ft. - UTM 18 536325E 4392550N – Lat. 39° 41' 02"N, Long. 74° 34' 35"W – *Assoc. spp.:* *Punctelia rudecta*, *Phaeophyscia rubropulchra*.

Thallus corticolous, crustose, areolate; areoles breaking down into soredia, KOH-, UV-; apothecia sparse; epihymenium orange/brown, KOH-; hymenium colorless; ascospores >8-per ascus, colorless, obtuse-ellipsoid.

James C. Lendemer *et al.* #995

July 1, 2003

w/ Zephyr Johnson and Randy Miller

117. *Trapeliopsis flexuosa* (Fries) Coppins & P. James

Det. J.C. Lendemer – July 2, 2003

Dup. Confirmed (NY!) – R.C. Harris – July 24, 2003

UNITED STATES OF AMERICA. NEW JERSEY. ATLANTIC COUNTY.: On the bark of a pitch pine (*Pinus rigida*), in a mixed pine (*Pinus echinata*, *P. rigida*, and *P. virginiana*) / oak (*Quercus* spp.) forest, along an unnamed sand road, ca. 1 mile northwest of Batsto, Batsto Natural Area, Wharton State Forest. – elev. <10 ft. - UTM 18 528838E 4388439N – Lat. 39° 38' 50"N, Long. 74° 39' 50"W – *Assoc. spp.:* *Punctelia subrudecta*, *Cladonia* spp., *Trapeliopsis flexuosa*, *Hypocenomyce anthracophila*.

Thallus corticolous, crustose, soraliate; areoles small, green/blue; soralia abundant, greenish/blue.

James C. Lendemer *et al.* #996

July 1, 2003

w/ Zephyr Johnson and Randy Miller

118. *Hypocenomyce scalaris* (Acharius) Choisy

Det. J.C. Lendemer – July 2, 2003

Dup. Confirmed (NY!) – R.C. Harris – July 24, 2003

UNITED STATES OF AMERICA. NEW JERSEY. ATLANTIC COUNTY.: On the bark of a pitch pine (*Pinus rigida*), in a mixed pine (*Pinus echinata*, *P. rigida*, and *P. virginiana*) / oak (*Quercus* spp.) forest, along an unnamed sand road, ca. 1 mile northwest of Batsto, Batsto Natural Area, Wharton State Forest. – elev. <10 ft. - UTM 18 528838E 4388439N – Lat. 39° 38' 50"N, Long. 74° 39' 50"W – *Assoc. spp.:* *Punctelia subrudecta*, *Cladonia* spp., *Trapeliopsis flexuosa*, *Hypocenomyce anthracophila*.

Thallus corticolous, squamulose; squamules green, soraliate, C+ red. Some specimens are a mixture with *H. anthracophila* (squamules, C-).

James C. Lendemer *et al.* #994

July 1, 2003

w/ Zephyr Johnson and Randy Miller

119. *Arthonia rubella* (Fée) Nylander

Dup. Determined (NY!) – R.C. Harris – July 24, 2003

UNITED STATES OF AMERICA. NORTH CAROLINA. BRUNSWICK COUNTY.: On the bark of a large tree, in a lot slated for residential construction, along an unnamed gravel road through a subdivision, just over a low hill from a tidal marsh, Middle Island, Bald Head Island. – elev. ca. 10 ft. - UTM 18 224665E 3750576N – Lat. 33° 51' 41"N, Long. 77° 58' 34"W – *Assoc. spp.:* *Phaeographis dendritica*, *Thelotrema* spp., *Phaeographis lobata*, *Dirinaria picta*, *Fissurina insidiosa*.

Thallus corticolous, crustose, thin, white, esorediate; apothecia branched, red/brown; spores colorless, ca. 4-5 celled, transversely septate, 8-per ascus, ca. 60µm x 30µm, obtuse ellipsoid, macrocephalic; cortex KOH-, UV-; medulla KOH-, UV-.

James C. Lendemer #1013 & Rebecca Yahr

July 5, 2003

120. *Fissurina insidiosa* Knight & Mitten

Det. J.C. Lendemer – July 7, 2003

UNITED STATES OF AMERICA. NORTH CAROLINA. BRUNSWICK COUNTY.: On the bark of a large tree, in a lot slated for residential construction, along an unnamed gravel road through a subdivision, just over a low hill from a tidal marsh, Middle Island, Bald Head Island. – elev. ca. 10 ft. - UTM 18 224665E 3750576N – Lat. 33° 51' 41"N, Long. 77° 58' 34"W – *Assoc. spp.:* *Phaeographis dendritica*, *Thelotrema* spp., *Phaeographis lobata*, *Dirinaria picta*, *Arthonia rubella*.

Thallus corticolous, crustose, thick, green, esorediate; cortex KOH-, UV-; lirellae immersed, not carbonized; spores colorless, ca. 8-per ascus, 4-celled, transversely septate, 15µm x 9µm.

James C. Lendemer #1014 & Rebecca Yahr

July 5, 2003

121. *Byssoloma meadii* (Tuckerman) Ekman

Det. J.C. Lendemer – July 7, 2003

Dup. Confirmed (NY!) – R.C. Harris – July 24, 2003

UNITED STATES OF AMERICA. NORTH CAROLINA. CRAVEN COUNTY.: On *Lyonia*, in a wet, *Nyssa* dominated pocosin with a *Lyonia* understory, along the east shore of Catfish Lake, along Forest Service Road #158, ca. ½ mile north of intersection with Catfish Lake Road, Croatan National Forest. – elev. ca. 10 ft. - UTM 18 308416E 3867809N – Lat. 34° 56' 11"N, Long. 77° 05' 52"W – *Assoc. spp.:* *Gyalideopsis* sp., *Byssoloma* sp., *Lecanora* spp., *Trichothelium cestrense*.

Thallus corticolous, crustose, thin, green, UV+ orange; apothecial margins fuzzy, disks pale tan to somewhat dark; spores colorless, tapering to varying degrees, 1-4 celled, ca. 12-13µm x 2-3µm. Small thalli of another *Byssoloma* species are also present on some specimens however the apothecial disks are darker (purple-brown), and the thallus is UV-. Brodo et al. (2001) included *B. pubescens* Vězda ex Harris as a synonym of *B. meadii* however, both names remain on the current North American checklist (Esslinger, 1997). The synonymy is formally validated here².

James C. Lendemer #1017 & Rebecca Yahr

July 4, 2003

122. *Bactrospora mesospora* R.C. Harris

Det. J.C. Lendemer – July 7, 2003

Dup. Confirmed (NY!) – R.C. Harris – July 24, 2003

UNITED STATES OF AMERICA. NORTH CAROLINA. BRUNSWICK COUNTY.: On the bark of an oak (*Quercus*), in a pine (*Pinus*) – oak (*Quercus*) sand scrub community, just east of NC Route #17, 1 mile south of intersection with road (NC Route #113) to Orton Plantation, ca. 8 miles north of intersection of NC Routes #113 & #17, southwest of Wilmington. – elev. ca. 35 ft. - UTM 17 768340E 3779477N – Lat. 34° 07' 25"N, Long. 78° 05' 26"W – *Assoc. spp.:* *Parmotrema* spp., *Lecanora cupressi*, *Lecanora louisianae*, *Buellia* sp., *Hypotrachyna ossealba*, *Hypotrachyna livida*.

Thallus corticolous, crustose, thin, white; apothecia black, margins often excluded; spores colorless, ca. 8-per ascus, narrow, thread-like, ca. 10-celled, 36µm x 2.25µm.

James C. Lendemer #1019 & Rebecca Yahr

July 5, 2003

123. *Calicium hyperelloides* Nylander

Dup. Determined (NY!) - R.C. Harris – September 4, 2003

UNITED STATES OF AMERICA. NORTH CAROLINA. BRUNSWICK COUNTY.: On bark of a tree at eye level (ca. 6 ft.), along the shore of a tidal marsh, on the edge of a mixed hardwood forest, several hundred feet south of a gravel road, at the terminus of a large path, Middle Island, Bald Head Island. –

elev. ca. 5 ft. - UTM 18 223493E 3751073N – Lat. 33° 51' 56"N, Long. 77° 59' 20"W – *Assoc. spp.*: *Lepraria sp.*, *Lecanora spp.*, *Pseudoparmelia uleana*.

Thallus corticolous, crustose, thin to thick, white; cortex UV+ dull orange/pink; spores brown, 2-celled, ellipsoid, slightly constricted, pointed at ends, 10-13µm x 4-5µm.

James C. Lendemer #1023 & Rebecca Yahr

July 5, 2003

124. *Sarcogyne regularis* Körber

Det. J.C. Lendemer – July 9, 2003

UNITED STATES OF AMERICA. NEW JERSEY. CUMBERLAND COUNTY.: On an old stone bridge, over a small stream along an unnamed sand/gravel road, ca. ½ mile west of intersection with May's Landing Road, ca. ½ mile east of intersection with Union Road. – elev. ca. 80 ft. – *Assoc. spp.*: *Verrucaria calkinsiana*, *Caloplaca sp.*, *Verrucaria sp.*, *Lecanora dispersa*.

Thallus saxicolous, crustose, immersed in substrate, KOH-; apothecia pale reddish to black, disks pruinose; spores colorless, broadly ellipsoid, 1-celled, >8 (many) spores per ascus, 2µm x 4µm.

James C. Lendemer *et al.* #1031
w/ James A. Macklin & Gerry Moore

July 8, 2003

125. *Cladonia subcariosa* Nylander *s. lat.*

Det. J.C. Lendemer – July 10, 2003

UNITED STATES OF AMERICA. NEW JERSEY. CUMBERLAND COUNTY.: On sandy soil with bryophytes, on the edge of an open meadow, along an unnamed sand/gravel road, ca. ½ mile west of intersection with May's Landing Road, ca. ½ mile east of intersection with Union Road. – elev. ca. 80 ft. – *Assoc. spp.*: *Flavoparmelia caperata (terricolous)*, *Cladonia grayi*, *Cladonia spp.*

Thallus terricolous, esorediate; podetia short, lacking cups, esorediate, occasionally with large esorediate squamules, apothecia brown; squamules esorediate, KOH-, C-.

James C. Lendemer *et al.* #1037
w/ James A. Macklin & Gerry Moore

July 8, 2003

126. *Thelotrema adjectum* Nylander

Dup. Determined (NY!) - R.C. Harris – September 4, 2003

UNITED STATES OF AMERICA. NORTH CAROLINA. CRAVEN COUNTY.: On the bark of a tree on the margins of a freshwater swamp, bordering a mixed forest of *Magnolia*, *Ilex*, *Quercus*, *etc.*, along a tributary to Otter Creek, several hundred yards northwest of Flanner Beach Road, ca. ½ mile from terminus of Flanner Beach Road (Flanner Beach Camp Ground), Croatan Game Lands. – elev. ca. 25 ft. - UTM 18 321858E 3872544N – Lat. 34° 58' 54"N, Long. 76° 57' 06"W – *Assoc. spp.*: *Opegrapha sp.*, *Lecanora sp.*

Thallus corticolous, crustose, thin, blue-white, esorediate, lacking isidia; apothecia immersed in substrate; exciple not carbonized; spores 1-4 per ascus, oblong, 1-4 x 15 celled, muriform, ca. 92-106µm x 22µm, colorless turning pale brown when mature; paraphyses simple.

James C. Lendemer #1048 & Rebecca Yahr

July 4, 2003

127. *Parmotrema hypotropum* (Nylander) Hale

Det. James C. Lendemer – January 4, 2004

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On the branches of an oak (*Quercus*), on the edge of a large clearing with sparse oaks (*Quercus*) and bordered by an unnamed stream and a pine dominated pine – oak forest, Hampton Furnace, ca. 3 miles northeast of Atsion, Wharton State Forest. – elev. 40 ft. - UTM 18 526729E 4401707N – Lat. 39° 45' 54"N, Long. 74° 41' 16"W. – *Assoc. spp.*: *Pyrrhospora varians*, *Punctelia rudecta*, *Punctelia subrudecta*, *sterile sorediate crustose spp.*

Thallus corticolous, foliose, sorediate, blue-gray, UV-; medulla white, KOH+ yellow turning red; underside mostly white with small black or brown patches; soralia marginal; lobes broad; marginal cilia sparse to abundant.

- 128.** *Phaeophyscia pusilloides* (Zahlbruckner) Esslinger
Dup. Determined (NDA!) – T.L. Esslinger – February 20, 2004

UNITED STATES OF AMERICA. WEST VIRGINIA. POCAHONTAS COUNTY.: On a large maple (*Acer* sp.), in a mixed hardwood forest along High Rocks Trail, ca. 1 mile from trail head, Cranberry Wilderness, Monongahela National Forest. – elev. ca. 1250 ft. - UTM 17 569651E 4228958N – Lat. 38° 12' 28"N, Long. 80° 12' 16"W – *Assoc. spp.:* *Phaeophyscia rubropulchra*, *Pertusaria* spp., *Biatora longispora*, *Heterodermia appalachensis*, *Pyxine sorediata*.

Thallus corticolous, foliose, closely attached to substrate, gray, soraliolate; underside black; rhizines abundant, short, black with white tips; medulla white; soralia marginal, capitate on short ± erect (upturned) lobes; soredia gray/green, farinose.

James C. Lendemer #1453 & Moira J. Moody

May 22, 2003

- 129.** *Lecanora thysanophora* R.C. Harris
Det. J.C. Lendemer – September 8, 2003
Dup. Confirmed (NY!) – R.C. Harris – October 22, 2003

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On the trunk of a maple (*Acer*), in an open forest of *Acer*, *Quercus*, and *Pinus* with a dense *Vaccinium* understory, on the margins of a dense cedar swamp, along a road used for timber harvesting, west of Red Road (Stevenson Road), Oswego River Preserve. – elev. ca. 100 ft. - UTM 18 550794E 4402313N – Lat. 39° 46' 16"N, Long. 74° 24' 25"W – *Assoc. spp.:* *Lecanora rugosella*, *Flavoparmelia caperata*, *Catillaria atropurpurea*, *Loxospora pustulata*.

Thallus corticolous, crustose, leprose, sorediate, KOH+ yellow (faint), C-, UV-; prothallus present, conspicuous, white, fibrous, often with a thin blackish-gray zone; soredia forming a continuous thallus.

James C. Lendemer #1176 & Moira J. Moody

September 6, 2003

- 130.** *Cladonia rappii* A. Evans
Det. J.C. Lendemer – September 9, 2003

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On sandy soil, in a low swale with *Drosera*, along an unnamed sand road, west of Red Road (Stevenson Road), Oswego River Preserve. – elev. ca. 100 ft. - UTM 18 550897E 4402317N – Lat. 39° 46' 16"N, Long. 74° 24' 21"W – *Assoc. spp.:* *Cladonia grayi*, *Cladonia cristatella*, *Cladonia strepsilis*.

Thallus terricolous, fruticose; “primary” squamules sparse to abundant, esorediate; podetia forming tall, stacked cups, flat not concave.

James C. Lendemer #1199 & Moira J. Moody

September 6, 2003

- 131.** *Pycnothelia papillaria* Dufour
Det. J.C. Lendemer – September 10, 2003

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On sandy soil, on a mound of recently disturbed soil, along Red Road (Stevenson Road) at its intersection with Long Road, through a pine (*Pinus rigida*, *Pinus virginiana*) dominated pine – oak (*Quercus*) forest, Oswego River Preserve. – elev. ca. 100 ft. - UTM 18 550557E 4401443N – Lat. 39° 45' 48"N, Long. 74° 24' 35"W – *Assoc. spp.:* *Cladonia strepsilis*.

Thallus terricolous, esorediate, thin, blue-gray, UV-; podetia short, thick, inflated.

James C. Lendemer #1204 & Moira J. Moody

September 6, 2003

- 132.** *Cladonia coniocraea* (Flörke) Sprengel
Det. J.C. Lendemer – September 10, 2003

UNITED STATES OF AMERICA. NEW JERSEY. BURLINGTON COUNTY.: On a rotting log in partial sun, in a dense cedar swamp with abundant *Sphagnum* and no standing water, along a road used for timber harvesting, west of Red Road (Stevenson Road), Oswego River Preserve. – elev. ca. 100 ft. - UTM 18 550694E 4402058N – Lat. 39° 46' 08"N, Long. 74° 24' 29"W – *Assoc. spp.:* *Cladonia macilenta (barbatic acid chemotype)*.

Thallus lignicolous, fruticose, sorediate, UV-; “primary” squamules green, lobed, large, underside white, PD+ red; podetia short to tall, slender to somewhat thick, tapering, sorediate; soredia covering entire podetium, though often absent from some portions, lower portions lacking a cortex or with small patches of poorly defined cortex near base.

James C. Lendemer #1206 & Moira J. Moody

September 6, 2003

133. *Ochrolechia arborea* (Kreyer) Almborn
Det. J.C. Lendemer – September 25, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On the trunk of a red maple (*Acer rubrum*), in a large sunny opening in a hardwood swamp with coniferous margins, east of Elmore Road, .3 miles north of CT Route #272, Holleran Swamp Preserve, northwest of Norfolk. – elev. ca. 420 ft. – UTM 18 648622E 4655385N - Lat. 42° 02' 18"N, Long. 73° 12' 16"W – *Assoc. spp.:* *sterile sorediate spp., Hypogymnia physodes, Parmelia sulcata, Ropalospora chlorantha, Lecanora thysanophora.*

Thallus corticolous, crustose, thick, smooth to verruculose, white, soraliate, UV+ yellow; soralia well defined, yellowish, C+ red, UV+ yellow/orange.

James C. Lendemer *et al.* #1307
w/ participants of 2003 Andrews Foray

September 20, 2003

134. *Peltigera neckeri* Hepp ex Müll. Arg.
Det. J.C. Lendemer – September 25, 2003
Dup. Confirmed (H!) – O. Vitikainen – February 26, 2004

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On moss over a shaded calcareous rock, hillside with large limestone outcrop in a mixed hardwood forest, northwest corner of Mountain View Cemetery, northwest of Sand Road, North Canaan. - elev. ca. 300 m. – UTM 18 637447E 4652685N – Lat. 42° 00' 58"N, Long. 73° 20' 24"W – *Assoc. spp. Peltigera lepidophora, Pertusaria globularis, Myelochroa aurulenta, Heterodermia speciosa, Aspicilia sp., Acarospora sp., Punctelia rudecta, Dimerella pineti.*

Thallus muscicolous, foliose, esorediate, isidia lacking, apothecia present; cortex gray; underside brown/black, margins white, rhizines sparse; apothecia saddle-shaped, well curled, black, small.

James C. Lendemer *et al.* #1309
w/ Bruce Allen, William R. Buck, and Richard C. Harris

September 21, 2003

135. *Pertusaria globularis* (Acharius) Tuckerman
Det. J.C. Lendemer – September 25, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On moss over shaded calcareous rock, hillside with large limestone outcrop in a mixed hardwood forest, northwest corner of Mountain View Cemetery, northwest of Sand Road, North Canaan. - elev. ca. 300 m. – UTM 18 637447E 4652685N – Lat. 42° 00' 58"N, Long. 73° 20' 24"W – *Assoc. spp. Peltigera praetextata, Peltigera evansiana, Peltigera neckeri, Myelochroa aurulenta, Heterodermia speciosa, Aspicilia sp., Acarospora sp., Punctelia rudecta, Dimerella pineti.*

Thallus saxicolous/muscicolous, crustose, thin, esorediate, isidiate, blue-gray; margins smooth, blue-gray; isidia abundant, not brown tipped; cortex C-.

James C. Lendemer *et al.* #1310
w/ Bruce Allen, William R. Buck, and Richard C. Harris

September 21, 2003

136. *Phaeophyscia endococcinoides* (Poelt) Esslinger
Det. J.C. Lendemer – September 26, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On moss over shaded calcareous rock, hillside with large limestone outcrop in a mixed hardwood forest, northwest corner of Mountain View Cemetery, northwest of Sand Road, North Canaan. - elev. ca. 300 m. – UTM 18 637447E 4652685N – Lat. 42° 00' 58"N, Long. 73° 20' 24"W – *Assoc. spp.* *Peltigera praetextata*, *Peltigera lepidophora*, *Peltigera neckeri*, *Myelochroa aurulenta*, *Heterodermia speciosa*, *Aspicilia sp.*, *Acarospora sp.*, *Punctelia rudecta*, *Dimerella pineti*, *Pertusaria globularis*.

Thallus saxicolous/muscicolous, foliose, esorediate, apotheciate, loosely attached to substrate; medulla red.

James C. Lendmer *et al.* #1311

September 21, 2003

w/ Bruce Allen, William R. Buck, and Richard C. Harris

137. *Agonimia opuntiella* (Buschardt & Poelt) Vězda³

Det. J.C. Lendemer – September 26, 2003

Dup. Confirmed (NY!) – R.C. Harris – December 24, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On soil with mosses, on the rim of an old limestone quarry, ca. ½ mile north of CT Route #126, west of Sand Road, Canaan. – elev. ca. 600-800 ft. - UTM 18 636036E 4648895N – Lat. 41° 58' 56"N, Long. 73° 21' 28"W – *Assoc. spp.:* *Placidium sp.*, *Bacidia sp.*

Thallus terricolous/lignicolous, squamulose, sorediate; squamules green to brown-gray, with stiff colorless cilia/hairs.

James C. Lendemer *et al.* #1340

September 21, 2003

w/ participants of 2003 A. Leroy Andrews Foray

138. *Mycocalicium subtile* (Persoon) Szatala

Dup. Determined (NY!) – R.C. Harris – November 17, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On a decorticate tree trunk, in a large sunny opening in a hardwood swamp with coniferous margins, east of Elmore Road, .3 miles north of CT Route #272, Holleran Swamp Preserve, northwest of Norfolk. – elev. ca. 420 ft. – UTM 18 648622E 4655385N - Lat. 42° 02' 18"N, Long. 73° 12' 16"W – *Assoc. spp.:* *Parmelia squarrosa*.

Thallus lignicolous/corticolous, immersed within substrate; spores 2-celled, ellipsoid, transversely septate, brown, 6-9.5µm x 2-3µm; asci disintegrating; capitulum black.

James C. Lendemer *et al.* #1341

September 20, 2003

w/ participants of 2003 A. Leroy Andrews Foray

139. *Peltigera rufescens* (Wiess) Humb.

Det. J.C. Lendemer – September 29, 2003

Dup. Confirmed (H!) – O. Vitikainen – February 26, 2004

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On calcareous sandy soil, on the rim of an old limestone quarry, ca. ½ mile north of CT Route #126, west of Sand Road, Canaan. – elev. ca. 600-800 ft. - UTM 18 636036E 4648895N – Lat. 41° 58' 56"N, Long. 73° 21' 28"W – *Assoc. spp.:* *Placidium sp.*, *Cladonia pocillum*.

Thallus terricolous, foliose, gray-brown, esorediate, isidia lacking; lobes narrow, with a heavy white tomentum, margins strongly upturned; underside dark, pale white near margins; veins raised; rhizines short.

James C. Lendemer *et al.* #1356

September 21, 2003

w/ participants of 2003 A. Leroy Andrews Foray

140. *Peltigera neckeri* Hepp *ex* Müll. Arg.

Dup. Determined (H!) – O. Vitikainen – February 26, 2004

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On mosses over a large limestone boulder, in a dense mixed-hardwood forest, on the rim of an old limestone quarry, ca. ½ mile north of CT Route #126, west of Sand Road, Canaan. – elev. ca. 600-800 ft. - UTM 18 636036E 4648895N – Lat. 41° 58' 56"N, Long. 73° 21' 28"W – *Assoc. spp.: Phaeophyscia squarrosa, Anaptychia palmulata, Leptogium cyanescens.*

Thallus muscicolous/saxicolous, foliose, esorediate, isidia lacking, lobules abundant; upper surface smooth, dull gray-brown; lower surface pale, darker towards center.

James C. Lendemer *et al.* #1359
w/ participants of 2003 A. Leroy Andrews Foray

September 21, 2003

141. *Cladonia pocillum* (Acharius) Grognot
Det. J.C. Lendemer – September 29, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On calcareous sandy soil, on the rim of an old limestone quarry, ca. ½ mile north of CT Route #126, west of Sand Road, Canaan. – elev. ca. 600-800 ft. - UTM 18 636036E 4648895N – Lat. 41° 58' 56"N, Long. 73° 21' 28"W – *Assoc. spp.: Placidium sp., Peltigera rufescens.*

Thallus terricolous, “primary” squamules large, thick, nearly foliose; podetia short, gray-green, cupped, esorediate; apothecia brown, along margins of the cups.

James C. Lendemer *et al.* #1357
w/ participants of 2003 A. Leroy Andrews Foray

September 21, 2003

142. *Cladonia conista* A. Evans
Det. J.C. Lendemer – December 12, 2003
Dup. Confirmed (NY!) – R.C. Harris – December 24, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On shaded disturbed soil, along an abandoned road, along the rim of an old limestone quarry, ca. ½ mile north of CT Route #126, west of Sand Road, Canaan. – elev. ca. 600-800 ft. - UTM 18 636036E 4648895N – Lat. 41° 58' 56"N, Long. 73° 21' 28"W – *Assoc. spp.: Cladonia macilenta.*

Thallus terricolous, “primary” squamules sparse to absent, small, not lobed, underside white; podetia cupped, short, wide, soreciate; apothecia/pycnidia brown.

James C. Lendemer *et al.* #1358
w/ participants of 2003 A. Leroy Andrews Foray

September 21, 2003

143. *Cladonia subtenuis* (Abbayes) Mattick
Det. J.C. Lendemer – October 1, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On thin soil over granite ledge, on the edge of a mixed hardwood-conifer forest, bordering extensive granitic balds, Sam Yankee Woodlot, Great Mountain Forest, east of Canaan Mountain Road, Canaan. – elev. ca. 1300 ft. - UTM 18 642841E 4645858N – Lat. 41° 57' 13"N, Long. 73° 16' 36"W – *Assoc. spp.: Dimerella pineti, Cladonia squamosa, Xanthoparmelia somloensis, Xanthoparmelia conspersa.*

Thallus terricolous, podetia abundantly branched, white, esorediate, lacking a cortex, UV-; stereome pale, UV+ blue-white.

James C. Lendemer *et al.* #1360
w/ participants of 2003 A. Leroy Andrews Foray

September 20, 2003

144. *Physcia stellaris* (L.) Nylander
Det. J.C. Lendemer – October 2, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On the bark of small trees, on the rim of an old limestone quarry, ca. ½ mile north of CT Route #126, west of Sand Road, Canaan. – elev. ca. 600-800 ft. - UTM 18 636036E 4648895N – Lat. 41° 58' 56"N, Long. 73° 21' 28"W – *Assoc. spp.: Arthonia sp., Lecania nagelii.*

Thallus corticolous, foliose, esorediate, isidia lacking, apothecia abundant; apothecia pruinose, disks brown to purple-blue; spores 8-per ascus, with angular locules, 2-celled, brown, 16-17µm x 8µm; rhizines abundant, pale; medulla KOH-; paraphyses colorless, slender, not branched, little apically swollen.

James C. Lendemer *et al.* #1368
w/ participants of 2003 A. Leroy Andrews Foray

September 21, 2003

145. *Lecanora symmicta* (Acharius) Acharius
Det. J.C. Lendemer – October 2, 2003

UNITED STATES OF AMERICA. CONNECTICUT. LITCHFIELD COUNTY.: On old portions of wooden fence along road, at the intersection of Windrow Road and West Side Road, Norfolk. – elev. ca. 1200 ft. - UTM 18 648240E 4648013N – Lat. 41° 58' 20"N, Long. 73° 12' 39"W – *Assoc. spp.:* *Amandinea sp.*, *Lecanora sp.*

Thallus corticolous, crustose, thin, areolate, dispersed, yellow/pale, KOH-; apothecia pale yellow-brown to brownish-yellow, biatorine, epruinose; spores 8-per ascus, colorless, ellipsoid, simple, 10-14µm x 4-5µm; epihymenium brownish; hymenium colorless.

James C. Lendemer *et al.* #1367
w/ Bruce Allen, William R. Buck, and Richard C. Harris

September 20, 2003

146. *Cladonia grayi* G. Merrill *ex* Sandstede
Det. J.C. Lendemer – October 17, 2003

UNITED STATES OF AMERICA. PENNSYLVANIA. CARBON COUNTY.: On exposed organic debris and over bryophytes, on the disturbed margins of a road along a powerline cut, on an exposed ridge north of Drakes Creek, Drakes Creek Gorge, northwest of Unionville, Lehigh Gorge State Park. – elev. 1600 ft. - UTM 18 441827E 4536512N - Lat. 40° 58' 47"N, Long. 75° 41' 29"W – *Assoc. spp.:* *Cladonia spp.*

Thallus lignicolous/muscicolous, fruticose, UV+ blue-white; “primary” squamules abundant, small, disappearing as thallus ages; podetia short to tall, cupped, coarsely granular soorediate to slightly squamulose, proliferating from margins; apothecia brown.

James C. Lendemer #1424 & Moira J. Moody

October 16, 2003

147. *Dictyocatenulata alba* Finley & E. F. Morris
Det. J.C. Lendemer – October 17, 2003

UNITED STATES OF AMERICA. PENNSYLVANIA. CARBON COUNTY.: On the bark of a birch tree (*Betula*), along the north banks of Drakes Creek, in a mixed hardwood forest of *Acer* and *Betula* spp., Drakes Creek Gorge, northwest of Unionville, Lehigh Gorge State Park. – elev. ca. 1000 ft. - UTM 18 441081E 4535938N – Lat. 40° 58' 28"N, 75° 42' 01"W – *Assoc. spp.:* *sterile soorediate crustose spp.*, *Biatora longispora*, *Phaeophyscia rubropulchra*.

Thallus corticolous, crustose, thin, greenish, esorediate; +/- globose conidia produced on tall pale, slender stalks. See Lendemer & Harris (in press) for a discussion of the history, distribution, and recognition of this species as a lichenized fungus.

James C. Lendemer #1425 & Moira J. Moody

October 16, 2003

148. *Cladonia atlantica* A. Evans
Det. J.C. Lendemer – December 6, 2002
Dup. Confirmed (H!) – T. Ahti – March 10, 2003

UNITED STATES OF AMERICA. NEW JERSEY. CUMBERLAND COUNTY.: Growing on organic matter (needles of pitch pine (*Pinus rigida*)), in an open forest of *Pinus* spp. (mainly *P. rigida*) and oak (*Quercus* spp.), on bluffs along the west bank of the Manumuskin River, Nature Conservancy Protection Area, 1.5 miles northeast of Port Elizabeth, west of Manumuskin, southeast of Millville. – elev. <20 ft. - UTM 18 502224E 4353540N – Lat. 39° 20' 00"N, Lat. 74° 58' 27"W – *Assoc. spp.* – *Cladonia subtenuis*, *Cladonia grayi*, *Cladonia caespiticia*.

Thallus growing over organic matter, K-, UV+ blue-white; squamules thin, divided (lobed), esorediate, sparse; podetia tall, sparsely squamulose, apothecia brown. *Lendemera* 512 (*Lich. East N. Amer. Exs.* 42) is from the same locality however the podetia are shorter and densely squamulose.

James C. Lendemer #531 & Leonard H. Smith II

December 2, 2002

149. *Punctelia subrudecta* auct. Amer.

Det. J.C. Lendemer – October 23, 2003

UNITED STATES OF AMERICA. NEW JERSEY. ATLANTIC COUNTY.: On the branches of blueberry bushes (*Vaccinium*), on the margins of an abandoned blueberry (*Vaccinium*) farm and a mixed hardwood forest, 1/3 mile south of NJ Route #561, northeast of Germania, southeast of Egg Harbor City, Nature Conservancy Reserve. – elev. ca. 60 ft. – UTM 18 535529E 4372107N - Lat. 39° 29' 59"N, Long. 74° 35' 12"W – *Assoc. spp.:* *Trapeliopsis flexuosa*, *Lecanora strobilina*, *Punctelia rudecta*, *Myelochroa aurulenta*, *Parmelia squarrosa*, *Parmelia sulcata*, *Hypogymnia physodes*, *Tuckermannopsis fendleri*, *Pertusaria xanthodes*, *Amandinea punctata*, *Amandinea polyspora*, *Buellia* sp., *Usnea strigosa* ssp. *major*.

Thallus corticolous, foliose, loosely attached to substrate, soraliate; underside pale, brown; pseudocyphellae long, often branched; soralia marginal and laminal; medulla white, C+ red; lobe tips often browned; lobes broad, surface smooth not distinctly foveate, epruinose.

Wilhelm & Ladd (1987) first reported *Punctelia perreticulata* Räsänen, a sorediate *Punctelia* species containing lecanoric acid from North America, considering it to have a mid-west/western distribution in North America. Aptroot (2003) broadened the concept of *P. perreticulata* to include the material previously referred to *P. subrudecta* (Nylander) Krog, noting that *P. perreticulata* sensu Wilhelm & Ladd and the material previously referred to *P. subrudecta* could not be consistently distinguished from one another. Further study, of material from throughout North America and Mexico is clearly needed to determine if *P. subrudecta* auct. Amer. should be included within *P. perreticulata*. Thus, I have chosen to distribute this collections under the name *Punctelia subrudecta* auct. Amer., because the specimens are clearly not conspecific with the type of *P. subrudecta* (Nylander) Krog, and may prove to be distinct from *P. perreticulata* sensu Wilhelm & Ladd (1987).

James C. Lendemer *et al.* #1431

October 21, 2003

w/ Robert F.C. Naczi and Alfred E. Schuyler

150. *Diploschistes muscorum* (Scopoli) Santesson

Det. J.C. Lendemer – October 25, 2003

UNITED STATES OF AMERICA. NEW JERSEY. ATLANTIC COUNTY.: On *Cladonia* spp., over compact, gravelly soil, with small grasses and *Cladonia* spp., disturbed roadside, within several yards of mile marker 13, NJ Route 561, 3.6 km. north-northwest of Egg Harbor City. – elev. 80 ft. - UTM 18 528829E 4378746N – Lat. 39° 33' 28"N, Long. 74° 39' 52"W. – *Assoc. spp.:* *Cladonia subcariosa* s.l., *Cladonia rappii*, *Cladonia* spp.

Thallus lichenicolous, on *Cladonia* spp. (including *Cladonia subcariosa* s.l. and *C. rappii*), white, esorediate; ascomata immersed in thallus; spores muriform, brown/blackish, 25-28µm x 12-13.5µm, obtuse ellipsoid, tapering to one end.

James C. Lendemer *et al.* #1464

October 21, 2003

w/ Robert F.C. Naczi & Alfred E. Schuyler

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END NOTES

¹ *Placidium lacinulatum* (Acharius) Breuss var. *atrans* Breuss var. *nov.*

A varietate typica rhizinis excipulisque nigrescentibus distincta. Ascosporae 11-15 x 6-8 µm. Spermatia (sub)cylindrica, 4-6 x 1-1.5 µm.

TYPE: USA. MARYLAND. Cecil Co.: On soil with *Psora icterica*, in a serpentine barren with sparse grass, shrubby cover, and dead pine trees (*Pinus* sp.), on a hillside on the north/east shore of Conowingo Creek, several hundred yards east of Pilot Town Road (across from entrance to Girl Scout Camp), ca. ¾ mile southeast of Pilot, Pilot [Serpentine] Barrens, Nature Conservancy Property. elev. ca. 300 ft., UTM 18 397965E 4395175N (Lat. 39° 42' 08"N, Long. 76° 11' 25"W). 26.May.2003. J.C. Lendemer 867 = *Lich. East. N. Amer. Exs. III: 102* (hb. Lendemer, holotype; ASU, B, BG, CANB, CBM, CHR, DOV, FH, GZU, H, HMAS, M, MIN, S, TSB, TNS, TU, UPS, W, isotypes).

Refer to Breuss (2002a) for a detailed description of *P. lacinulatum* and a key to the infraspecific taxa of that species including *P. lacinulatum* var. *atrans*.

² *Byssoloma meadii* (Tuckerman) Ekman

Biatora meadii Tuckerman, Synops. N. Amer. Lich., 2: 129. 1888. TYPE: Florida, USA. *Mead s.n.* (FH-TUCK, lectotype (selected by Ekman (1996))).

Bacidia meadii (Tuckerman) Zahlbruckner, Cat. Lich. Univ., 4: 122. 1926.

Byssoloma meadii (Tuckerman) Ekman, Opera Botanica, 127: 131. 1996.

Syn. nov. *Byssoloma pubescens* Vězda ex R.C. Harris, More Florida Lichens, pp. 29-30. 1995. TYPE: On oak, Sanford, Seminole Co., Florida, USA. *Rapp s.n.* (NY!, holotype).

As has already been noted the synonymy of *B. pubescens* with *B. meadii* was proposed by Brodo (2001), both names however, remain on the North American Checklist (Esslinger, 1997). The synonymy is confirmed here.

³ *Agonimia opuntiiella* (Buschardt & Poelt) Vězda

Agonimia opuntiiella is here reported as new to North America. It is a distinctive species, and is easily recognized by its minute green squamulose thallus which produces blastidia (Poelt, 1980) on the underside of the squamules and small colorless hairs on the upper surface. The species can be confused with few other lichens in eastern North America though it does superficially resemble a small *Endocarpon* the hairs and soredia readily distinguish it. A detailed account of this species and its distribution in eastern North America will be provided in a future publication. It should be noted that Breuss (2002) reported *A. opuntiiella* from Mexico.

Specimens Examined. – USA. CONNECTICUT. Litchfield Co.: Lendemer et al. 1340 = *Lich. East. N. Amer. Exs., III: 137* (ASU, B, BG, CANB, CBM, CHR, DOV, FH, GZU, H, HMAS, M, MIN, NY, S, TSB, TNS, TU, UPS, herb. Lendemer).