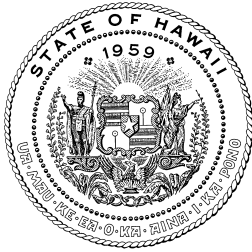


Small Business Regulatory Review Board Meeting

May 30, 2023

10:00 a.m.



SMALL BUSINESS REGULATORY REVIEW BOARD

Department of Business, Economic Development & Tourism (DBEDT)
No. 1 Capitol District Building, 250 S. Hotel Street, Fifth Floor, Honolulu, HI 96813
Mailing Address: P.O. Box 2359, Honolulu, HI 96804
Email: dbedt.sbrb.info@hawaii.gov
Website: sbrb.hawaii.gov

Tel: 808 798-0737

AGENDA

Tuesday, May 30, 2023 ★ 10:00 a.m.

**Leiopapa A Kamehameha Building – State Office Tower
235 S. Beretania Street, Conference Room 405
Honolulu, HI 96813**

Josh Green, M.D.
Governor

James K. Tokioka
DBEDT Director

Members

Robert Cundiff
*Chairperson
O'ahu*

Mary Albitz
*Vice Chairperson
Maui*

Jonathan Shick
*2nd Vice Chairperson
O'ahu*

Dr. Nancy Atmospera-
Walch
O'ahu

William Lydgate
Kaua'i

James (Kimo) Lee
Hawai'i

Garth Yamanaka
Hawai'i

Taryn Rodighiero
Kaua'i

Sanford Morioka
O'ahu

Tessa Gomes
O'ahu

Mark Ritchie for
Director, DBEDT
Voting Ex Officio

As authorized under Act 220, Session Laws of Hawaii 2021 and Chapter 92-3.7 Hawaii Revised Statutes (HRS), the public can participate in the meeting either:

A. By attending the in-person meeting at:

**Leiopapa A Kamehameha Building – State Office Tower
235 S. Beretania Street, Conference Room 405, Honolulu, HI 96813; or**

B. Via Video-audio livestream or via Telephone - to join the Video-audio livestream meeting, go to:

<https://us06web.zoom.us/j/88945374966?pwd=cDhqWEEzZGZHYmJLM05tMHU5Mm5HQ109>

C. To Join via Telephone: Dial 1-669-900-6833 with Meeting ID 883 5814 0200 Passcode 066739

When the Chairperson asks for public testimony during the meeting, you may indicate that you want to provide oral testimony by using the raise hand function or, if calling in by telephone, entering * and 9 on your phone keypad. When recognized by the Chairperson, you will be unmuted. If calling in by phone, you can unmute and mute yourself by pressing * and 6 on your keypad.

Members of the public may also submit written testimony via e-mail to:

DBEDT.sbrb.info@hawaii.gov or mailed to SBRRB, No. 1 Capitol District Building, 250 S. Hotel Street, Room 506A, Honolulu, HI 96813, or P.O. Box 2359, Honolulu, HI 96804. All written testimony should be received no later than 4:30 p.m., Friday, May 26, 2023.

Copies of the Board Packet will be available on-line for review at: [Agendas & Minutes – Small Business Regulatory Review Board \(hawaii.gov\)](#). An electronic draft of the minutes for this meeting will also be made available at the same location when completed.

The Board may go into Executive Session under Section 92-5 (a)(4), HRS to Consult with the Board's Attorney on Questions and Issues Concerning the Board's Powers, Duties, Immunities, Privileges and Liabilities.

I. Call to Order

II. Approval of April 20, 2023 Meeting Minutes

III. **New Business**

- A. Discussion and Action on the Proposed Amendments to Hawaii Administrative Rules (HAR) Title 4 Chapter 71, **Plant and Non-Domestic Animal Quarantine Non-Domestic Animal Import Rules**, as follows, promulgated by Department of Agriculture (DoAG) – **Discussion Leader – James Kimo Lee**
 - a. Placement of the **Beetle Syphraea uberabensis** onto the List of Restricted Animals (Part A)
 - b. Placement of the **Southern House Mosquito Culex quinquefasciatus** onto the List of Restricted Animals (Part A)
 - c. Placement of the **Butterfly Euselasia chrysippe** onto the List of Restricted Animals (Part A)
- B. Discussion and Action on the Proposed Amendments to HAR Title 4 Chapter 72, **Plant and Non-Domestic Animal Quarantine Plant Intrastate Rules**, promulgated by DoAG – **Discussion Leader – James Kimo Lee**
- C. Discussion and Action on the Proposed Amendments to HAR Title 4 Chapter 71A, **Plant and Non-Domestic Animal Quarantine, Microorganism Import Rules**, promulgated by DoAG – **Discussion Leader – James Kimo Lee**
- D. Discussion and Action on the Proposed Amendments to HAR Title 13 Chapter 95, **Rules Regulating the Taking and Selling of Certain Marine Resources**, promulgated by Department of Land and Natural Resources – **Discussion Leader – Jonathan Shick**

IV. **Legislative Matters**

- A. Update on Governor’s Message Submitted for Consideration for the Gubernatorial Nomination of Jennifer Salisbury to the Small Business Regulatory Review Board for a term to expire June 30, 2027

V. **Administrative Matters**

- A. Update on the Board’s Upcoming Advocacy Activities and Programs in accordance with the Board’s Powers under Section 201M-5, Hawaii Revised Statutes
 - 1. Board’s Budget Request
 - 2. Presentations to Industry Associations
 - 3. Staff Small Business Outreach
 - 4. Director Letters and Meetings with State Agencies and Counties

VI. Next Meeting: Thursday, June 15, 2023 at 10:00 a.m., held via Zoom and at Leiopapa A Kamehameha Building – State Office Tower, Conference Room 405, Honolulu, HI 96813

VII. **Adjournment**

If you need an auxiliary aid/service or other accommodation due to a disability, contact Jet’aime Ariola at 808 587-0737 and jetaime.k.ariola@hawaii.gov as soon as possible, preferably at least three (3) working days prior to the meeting. Requests made as early as possible have a greater likelihood of being fulfilled.

Upon request, this notice is available in alternate/accessible formats.

II. Approval of April 20, 2023 Meeting Minutes

Small Business Regulatory Review Board

MEETING MINUTES - **DRAFT**

April 20, 2023

- I. **CALL TO ORDER:** Chair Cundiff called the meeting to order at 10:03 a.m., with a quorum present.

MEMBERS PRESENT:

- Robert Cundiff, Chair
- Mary Albitz, Vice Chair
- Jonathan Shick, 2nd Vice Chair
- Garth Yamanaka
- Dr. Nancy Atmospera-Walsh
- Sanford Morioka
- Mark Ritchie

ABSENT MEMBERS:

- James (Kimo) Lee
- Taryn Rodighiero
- William Lydgate
- Tessa Gomes

STAFF: DBEDT

Dane Wicker
 Dori Palcovich
 Jet'aime Ariola

Office of the Attorney General

Alison Kato

II. APPROVAL OF March 14, 2023 MINUTES

Second Vice Chair Shick motioned to accept the March 14, 2023 meeting minutes, as presented. Mr. Ritchie seconded the motion, and the Board members unanimously agreed.

Mr. Dane Wicker, DBEDT’s newly confirmed Deputy Director, was introduced to the board members. He provided a brief history and background of his past work experience with the State and his current small business.

Chair Cundiff thanked Deputy Director Wicker for his assistance with helping to provide funds from the State legislature for the Board’s advertising and outreach for this coming fiscal year.

III. LEGISLATIVE Matters

A. Discussion and Update of the following legislative matters:

1. Governor’s Message 654 Submitted for Consideration for the Gubernatorial Nomination of Sanford Morioka to the Small Business Regulatory Review Board for a term to expire June 30, 2027

Chair Cundiff indicated that Mr. Morioka went to the committee hearing last week and was recommended for advise and consent. His nomination will now go to the full Senate for confirmation. Congratulations to Sanford!

2. Governor's Message for Consideration for the Gubernatorial Nomination of Jennifer Salisbury to the Small Business Regulatory Review Board for a term to expire June 30, 2027

There is currently no update on Ms. Salisbury's nomination to this Board; her nomination has yet to be submitted for confirmation. DBEDT staff will follow-up with the Senate President's Office.

3. Senate Bill 1196 SD1 HD1, Relating to Boards and Commissions – Clarifies that the authorization for board and commission holdover members to continue in office until a successor is nominated and appointed, but not beyond the end of the second regular legislative session following the expiration of the member's term of office, takes precedence over all conflicting statutes concerning holdover members

Chair Cundiff indicated that this bill is for the member's information only. Mr. Yamanaka's membership is being considered for holdover.

Deputy Attorney General Kato does not believe Senate Bill 1196 will have an effect on this Board. This measure essentially clarifies precedence when there is a conflict with another outside statute.

IV. ADMINISTRATIVE MATTERS

A. Updates on the Board's Upcoming Advocacy Activities and Programs in accordance with the Board's Powers under Section 201M-5, Hawaii Revised Statutes

1. Board's Budget Request

Chair Cundiff stated that, with the support of staff and Deputy Director Wicker, this Board received \$57,306 in funding for fiscal year 2024 from the State legislature, specifically for outreach and advertising. This is in addition to the \$20,000 this Board receives on an annual basis for operational expenses.

DBEDT will be contracting with a third-party public relations firm to assist with outreach efforts for this Board and some of DBEDT's other attached agencies and divisions. The funds will also be utilized for assisting with having neighbor island board meeting(s).

2. Presentations to Industry Associations

The following presentations were recently conducted:

- Maui Economic Development Board – March 7th – by Vice Chair Albitz and Jet'aime Ariola
- Maui Liquor Commission – March 16th – by Vice Chair Albitz
- Maui Chamber of Commerce Radio Show – March 28th – Vice Chair Albitz

Chair Cundiff and Mr. Yamanaka will be presenting on behalf of this Board to the Hilo Japanese Chamber of Commerce on June 21st.

Second Vice Chair Shick will inquire into the Hawaii Chamber of Commerce as to when this Board can be scheduled to do a presentation. DBEDT staff will follow-up with telephone calls to the letters that were recently sent to trade and industry associations.

3. Staff's Small Business Outreach

Ms. Ariola has done small business outreach for the past several weeks. While her concentration was mainly to retail, service companies and restaurants, she is interested in expanding and broadening her scope with other industries and businesses such as agriculture. Recently, she visited an agricultural company, Mari's Gardens, located in Mililani.

4. Director Letters and Meetings with State Agencies and Counties

An updated listing from the Governor's office of all the confirmed State department directors was recently requested. To date, four letters from this Board were sent out to known confirmed directors. As confirmations come in, letters will be sent out with copies to the Board's discussion leaders.

- V. **NEXT MEETING** - Thursday, May 18, 2023 at 10:00 a.m. in conference room 405 at Leiopapa A Kamehameha Building – State Office Tower – 235 Beretania Street, Honolulu, HI 96813.
- VI. **ADJOURNMENT** – Vice Chair Albitz motioned to adjourn the meeting and Dr. Atmospera-Walch seconded the motion; the meeting adjourned at 10:32 a.m.

III. NEW BUSINESS

- A. Discussion and Action on the Proposed Amendments to HAR Title 4 Chapter 71, **Plant and Non-Domestic Animal Quarantine Non-Domestic Animal Import Rules**, as follows, promulgated by DoAg
 - a. Placement of the **Beetle Syphraea uberabensis** onto the List of Restricted Animals (Part A)
 - b. Placement of the **Southern House Mosquito Culex quinquefasciatus** onto the List of Restricted Animals (Part A)
 - c. Placement of the **Butterfly Euselasia chrysippe** onto the List of Restricted Animals (Part A)

**PRE-PUBLIC HEARING SMALL BUSINESS IMPACT STATEMENT
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**
(Hawaii Revised Statutes §201M-2)

RECEIVED
By SBRRB at 10:13 am, Apr 21, 2023

Date: _____

Department or Agency: _____

Administrative Rule Title and Chapter: _____

Chapter Name: _____

Contact Person/Title: _____

E-mail: _____ Phone: _____

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7?

Yes No

If "Yes," provide details: _____

I. Rule Description:

New Repeal Amendment Compilation

II. Will the proposed rule(s) affect small business?

Yes No

(If "No," no need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit corporation, limited liability company, partnership, limited partnership, sole proprietorship, or other legal entity that: (1) Is domiciled and authorized to do business in Hawaii; (2) Is independently owned and operated; and (3) Employs fewer than one hundred full-time or part-time employees in Hawaii." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance?

Yes No

(If "Yes" no need to submit this form. E.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives. HRS §201M-2(d))

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a))

Yes No

(If "Yes" no need to submit this form.)

* * *

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.

5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.

6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.

7. How the agency involved small business in the development of the proposed rules.
 - a. If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.

- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.

- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.

- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.

- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.

* * *

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594 / Email: DBEDT.sbrrb.info@hawaii.gov

This Statement may be found on the SBRRB Website at: <http://dbedt.hawaii.gov/sbrrb/resources/small-business-impact-statements>

Chapter 4-71, Hawaii Administrative Rule Amendments

Board of Agriculture Approved: October 11, 2022

Subject: (1) Placement of the Beetle *Syphraea uberabensis* onto the List of Restricted Animals (Part A) in Chapter 4-71, HAR; (2) Allowing the Import and Release of the Beetle *Syphraea uberabensis* For Biocontrol of the Invasive Weed *Tibouchina herbacea*; and (3) Proceed with a Public Hearing in Connection with the Proposed Amendment to Chapter 4-71, HAR.

At its meeting on October 11, 2022, the Hawaii Board of Agriculture's (Board) decision to allow the importation of the beetle *Syphraea uberabensis* for biocontrol of the invasive weed *Tibouchina herbacea* was based on the potential risk to the ecological health and safety of Hawaii's native plant species. At this same meeting, the Board also voted to place *Syphraea uberabensis* the List of Restricted Animals Part A in order to allow its import for biocontrol of *Tibouchina herbacea*.

Specific amendment to Chapter 4-71, HAR, is as follows:

1. Section 4-71-6.5, Permitted Introductions

adds this insect *Syphraea uberabensis* to the List of Restricted Animals (Part A) to allow its import as biocontrol of *Tibouchina herbacea*.

Chapter 4-71, Hawaii Administrative Rule Amendments

Board of Agriculture Approved: June 9, 2022

Subject: (1) Placement of the Southern House Mosquito, *Culex quinquefasciatus*, onto the List of Restricted Animals (Part A) in Chapter 4-71, HAR; (2) Allowing the Import and Release of the Southern House Mosquito, *Culex quinquefasciatus*, For an Incompatible Breeding Program to Protect Native Forest Birds; and (3) Proceed with a Public Hearing in Connection with the Proposed Amendment to Chapter 4-71, HAR.

At its meeting on June 9, 2022, the Hawaii Board of Agriculture's (Board) decision to allow the importation and release of only male Southern House Mosquitos, *Culex quinquefasciatus*, for an incompatible breeding program to protect Hawaii's native forest birds was based on the potential risk to the ecological health and safety of Hawaii's native bird species, some of which are predicted to become extinct within the next 5-10 years. This program would utilize a practice called the Incompatible Insect Technique (IIT) where a different strain of a bacteria found in many insects worldwide, called *Wolbachia*, would be introduced into male mosquitos that would be shipped to Hawaii and released. When mosquitos having different strains of the *Wolbachia* bacteria mate with each other, they cannot produce viable offspring.

The mosquitos and the *Wolbachia* bacteria are not genetically modified and only male *Culex quinquefasciatus* mosquitos will be shipped to Hawaii for release. Male mosquitos do not bite. The *Wolbachia* bacteria cannot infect humans.

At this same meeting, the Board also voted to place *Culex quinquefasciatus* on the List of Restricted Animals Part A in order to allow its import for control of *Culex quinquefasciatus* populations in Hawaii.

Specific amendment to Chapter 4-71, HAR, is as follows:

1. Section 4-71-6.5, Permitted Introductions

adds this insect *Culex quinquefasciatus* to the List of Restricted Animals (Part A) to allow its import as a sexually incompatible strain to help control current *Culex quinquefasciatus* populations in Hawaii in order to protect native forest bird species.

Chapter 4-71, Hawaii Administrative Rule Amendments

Board of Agriculture Approved: October 11, 2022

Subject: (1) Placement of the Butterfly *Euselasia chrysippe* onto the List of Restricted Animals (Part A) in Chapter 4-71, HAR; (2) Allowing the Import and Release of the Butterfly *Euselasia chrysippe* For Biocontrol of the Invasive Weed *Miconia calvenscens*; and (3) Proceed with a Public Hearing in Connection with the Proposed Amendment to Chapter 4-71, HAR.

At its meeting on October 11, 2022, the Hawaii Board of Agriculture's (Board) decision to allow the importation of the butterfly *Euselasia chrysippe* for biocontrol of the invasive weed *Miconia calvenscens* was based on the potential risk to the ecological health and safety of Hawaii's native plant species. At this same meeting, the Board also voted to place *Miconia calvenscens* on the List of Restricted Animals Part A in order to allow its import for biocontrol of *Miconia calvenscens*.

Specific amendment to Chapter 4-71, HAR, is as follows:

1. Section 4-71-6.5, Permitted Introductions

adds the insect *Euselasia chrysippe* to the List of Restricted Animals (Part A) to allow its import as biocontrol of *Miconia calvenscens*.

§4-71-6.5

LIST OF RESTRICTED ANIMALS

APRIL 23, 2019

PART A: FOR RESEARCH AND EXHIBITION

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
INVERTEBRATES	
PHYLUM Annelida	
CLASS Hirudinea	
ORDER Gnathobdellida	
FAMILY Hirudinidae	
<u>Hirudo medicinalis</u>	leech, medicinal
ORDER Rhynchobdellae	
FAMILY Glossiphoniidae	
<u>Helobdella triserialis</u>	leech, small snail
CLASS Oligochaeta	
ORDER Haplotaxida	
FAMILY Euchytraeidae	
Enchytraeidae (all species in family)	worm, white
FAMILY Eudrilidae	
<u>Helodrilus foetidus</u>	earthworm
FAMILY Lumbricidae	
<u>Lumbricus terrestris</u>	earthworm
<u>Allophora</u> (all species in genus)	earthworm
CLASS Polychaeta	
ORDER Phyllodocida	
FAMILY Nereidae	
<u>Nereis japonica</u>	lugworm

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
PHYLUM Arthropoda CLASS Arachnida ORDER Acari FAMILY Phytoseiidae	
<u>Iphiseius degenerans</u>	predator, spider mite
<u>Mesoseiulus longipes</u>	predator, spider mite
<u>Mesoseiulus macropilis</u>	predator, spider mite
<u>Neoseiulus californicus</u>	predator, spider mite
<u>Neoseiulus longispinosus</u>	predator, spider mite
<u>Typhlodromus occidentalis</u>	mite, western predatory
FAMILY Tetranychidae <u>Tetranychus lintearius</u>	
	biocontrol agent, gorse
CLASS Crustacea ORDER Amphipoda FAMILY Hyalidae <u>Parhyale hawaiiensis</u>	
	amphipod, marine
ORDER Anomura FAMILY Porcellanidae	
<u>Petrolisthes cabrolloi</u>	crab, porcelain
<u>Petrolisthes cinctipes</u>	crab, porcelain
<u>Petrolisthes elongatus</u>	crab, porcelain
<u>Petrolisthes eriomerus</u>	crab, porcelain
<u>Petrolisthes gracilis</u>	crab, porcelain
<u>Petrolisthes granulatus</u>	crab, porcelain
<u>Petrolisthes japonicus</u>	crab, porcelain
<u>Petrolisthes laevigatus</u>	crab, porcelain
<u>Petrolisthes manimaculis</u>	crab, porcelain
<u>Petrolisthes tuberculatus</u>	crab, porcelain
<u>Petrolisthes violaceus</u>	crab, porcelain
ORDER Cladocera FAMILY Daphnidae <u>Ceriodaphnia dubia</u>	
	flea, water
ORDER Mysidacea FAMILY Mysidae <u>Mysidopsis bahia</u>	
	shrimp, mysid

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
CLASS Insecta	
ORDER Coleoptera	
FAMILY Apionidae	
<u>Apion scutellare</u>	biocontrol agent, gorse
FAMILY Buprestidae	
<u>Lius poseidon</u>	biocontrol agent, clidemia
FAMILY Chrysomelidae	
<u>Chlamisus gibbosa</u>	biocontrol agent, Blackberry
<u>Syphraea uberabensis</u>	biocontrol agent, Tibouchina herbacea
FAMILY Coccinellidae	
<u>Delphastus pusillus</u>	predator, spiraling whitefly
<u>Hippodamia convergens</u>	beetle, convergent lady
<u>Nephaspis oculatus</u>	predator, spiraling whitefly
<u>Nephaspis bicolor</u>	predator, spiraling whitefly
<u>Stethorus nigripes</u>	predator, spider mites
<u>Stethorus picipes</u>	predator, spider mites
FAMILY Curculionidae	
<u>Acythopeus</u> sp. 1	biocontrol agent, ivy gourd
<u>Acythopeus</u> sp. 2	biocontrol agent, ivy gourd
<u>Acythopeus</u> sp. 3	biocontrol agent, ivy gourd
<u>Auletobius convexifrons</u>	biocontrol agent, firetree
<u>Gymnaetron tetrum</u>	biocontrol agent, common mullein
FAMILY Scarabaeidae	
<u>Euoniticellus intermedius</u>	predator, hornfly
<u>Onitis vanderkelleni</u>	predator, horn fly
ORDER Diptera	
FAMILY Chamaemyiidae	
<u>Leucopis</u> (all species in subgenus)	predator

SCIENTIFIC NAMECOMMON NAME

FAMILY Culicidae

Culex quinquefasciatus

mosquito, southern house

FAMILY Drosophilidae

Drosophila (all species in genus)
Zaprionothrica sp.flies, pomace
biocontrol agent, banana
poka

FAMILY Lonchaeidae

Dasiops curubaebiocontrol agent, banana
poka

FAMILY Muscidae

Musca domestica

house fly

FAMILY Tephritidae

Ceratitus capitata
Urophora stylatafly, Mediterranean fruit
biocontrol agent, bull
thistle

ORDER Heteroptera

FAMILY Anthocoridae

Orius tristicolor

bug, minute pirate

ORDER Homoptera

FAMILY Eriococcidae

Tectococcus ovatusbiocontrol agent,
strawberry guava

ORDER Hymenoptera

FAMILY Aphelinidae

Aphelinus (all species in genus)
Cales noackiparasite, aphid
parasite, woolly
whiteflyEncarsia formosaparasite, greenhouse
whiteflyEncarsia guadeloupaeparasite, spiraling
whiteflyEncarsia ?haitiensisparasite, spiraling
whiteflyEncarsia luteaparasite, sweetpotato
whiteflyEncarsia mineoiparasite, sweetpotato
whitefly

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Encarsia pergandiella</u>	parasite, greenhouse whitefly
<u>Mesidia</u> (all species in genus)	parasite, aphid
<u>Mesidiopsis</u> (all species in genus)	parasite, aphid
<u>Protaphelinus</u> (all species in genus)	parasite, aphid
FAMILY Aphidiidae	
Aphidiidae (all species in family)	parasite, aphid
FAMILY Bethylidae	
<u>Cephalonomia stefanoderis</u> (lab-reared strains)	parasite, tropical nut borer
<u>Prorops nasuta</u> (lab-reared strains)	parasite, tropical nut borer
FAMILY Braconidae	
<u>Apanteles gelechiidivorus</u>	parasite, tomato pinworm
<u>Apanteles scutellaris</u>	parasite, tomato pinworm
<u>Diachasmimorpha tryoni</u>	wasp, parasitic
<u>Fopius ceratitivorus</u>	biocontrol agent, Mediterranean fruit fly
<u>Heterospilus coffeicola</u> (lab-reared strains)	parasite, tropical nut borer
<u>Opius dissitus</u>	parasite, leafminer
<u>Opius dimidiatus</u>	parasite, leafminer
<u>Orgilus elasmopalpi</u>	parasite, lesser cornstalk borer
<u>Parahormius pallidipes</u>	parasite, tomato pinworm
<u>Pseudapanteles dignus</u>	parasite, tomato pinworm
<u>Psytallia insignipennis</u>	parasite, Medfly
FAMILY Cynipidae	
<u>Ganaspidium utilis</u>	parasite, leafminer
FAMILY Encyrtidae	
<u>Copidosoma truncatellum</u>	parasite, green garden looper
<u>Psyllaephagus yaseeni</u>	parasite, leucaena psyllid
<u>Zeteticontus utilis</u>	parasite, souring beetles
FAMILY Eulophidae	
<u>Chrysocharis oscinidis</u>	parasite, leafminer

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Chrysonotomyia punctiventris</u>	parasite, leafminer
<u>Diaulinopsis callichroma</u>	parasite, leafminer
<u>Diglyphus begini</u>	parasite, leafminer
<u>Horismenus elineatus</u>	parasite, lesser cornstalk borer
<u>Pediobius acantha</u>	parasite, leafminer
<u>Phymasticus coffea</u> (lab-reared strains)	parasite, tropical nut borer
<u>Sympiesis stigmatipennis</u>	parasite, tomato pinworm
<u>Tetrastichus brontispae</u>	parasite, blue coconut leaf beetle
FAMILY Ichneumonidae	
<u>Diadegma aemiclausum</u>	parasite, diamondback moth
<u>Diadegma collaris</u>	parasite, diamondback moth
FAMILY Platygasteridae	
<u>Amitas ?spiniferus</u>	parasite, woolly whitefly
FAMILY Pteromalidae	
<u>Halticoptera patellana</u>	parasite, leafminer
FAMILY Tenthredinidae	
<u>Priophorus morio</u>	biocontrol agent, blackberry
ORDER Isoptera	
FAMILY Rhinotermitidae	
<u>Coptotermes formosanus</u>	termite, Formosan subterranean
ORDER Lepidoptera	
FAMILY Carposinidae	
<u>Carposinia bullata</u>	biocontrol agent, Koster's curse
FAMILY Coleophoridae	
<u>Coleophora klimeschiella</u>	biocontrol agent, Russian thistle
<u>Coleophora parthenica</u>	biocontrol agent, Russian thistle

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Crambidae <u>Pyrausta perelegans</u>	biocontrol agent, banana poka
FAMILY Dioptidae <u>Josia ligata</u>	biocontrol agent, banana poka
<u>Josia fluonia</u>	biocontrol agent, banana poka
FAMILY Gracillariidae <u>Caloptilia schinella</u>	biocontrol agent, firetree
<u>Phyllonorycter myricae</u>	biocontrol agent, firetree
FAMILY Momphidae <u>Mompha trithalama</u>	biocontrol agent, Koster's curse
FAMILY Noctuidae <u>Antiblemma acclinalis</u>	biocontrol agent, Koster's curse
<u>Cucullia verbasci</u>	biocontrol agent, common mullein
FAMILY Notodontidae <u>Cyanotricha necyria</u>	biocontrol agent, banana poka
FAMILY Oecophoridae <u>Agonopterix utlicetella</u>	biocontrol agent, gorse
FAMILY Pyralidae <u>Ephestia kuehniella</u>	moth, Mediterranean flour
<u>Galleria mellonella</u>	moth, greater wax
<u>Pempelia genistella</u>	biocontrol agent, gorse
FAMILY Riodinidae <u>Euselasia chrysippe</u>	biocontrol agent, miconia
FAMILY Scythrididae <u>Scythris gallicella</u>	biocontrol agent, gorse
FAMILY Sesiidae	

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Melittia oedipus</u>	biocontrol agent, ivy gourd
<u>Pennisetia marginata</u>	biocontrol agent, blackberry
FAMILY Tortricidae	
<u>Cryptophlebia ombrodelta</u>	moth, litchi fruit
ORDER Thysanoptera	
FAMILY Thripidae	
<u>Scolothrips sexmaculatus</u>	thrips, sixspotted
<u>Sericothrips staphylinus</u>	biocontrol agent, gorse
CLASS Crustacea	
ORDER Decapoda	
FAMILY Alpheidae	
<u>Athanas</u> (all species in genus)	shrimp, anemone
FAMILY Cambaridae	
<u>Cambarus</u> (all species in genus)	crayfish
FAMILY Coenobitidae	
<u>Birgus latro</u>	crab, coconut
<u>Coenobita brevimanus</u>	crab, hermit
<u>Coenobita perlatus</u>	crab, hermit
FAMILY Gecarcinidae	
<u>Cardisoma carnifex</u>	crab, land
<u>Cardisoma guanhumi</u>	crab, great land
<u>Gecarcoides lalandii</u>	crab, land
FAMILY Hippolytidae	
<u>Thor amoinessis</u>	shrimp, anemone
<u>Thor paschalis</u>	shrimp, anemone
FAMILY Majidae	
<u>Mithrax spinosissimus</u>	crab, herbivorous; spider, spiny
FAMILY Ocypodidae	
<u>Uca</u> (all species in genus)	crab, fiddler

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Palaemonidae	
<u>Periclimenes brevicarpalis</u>	shrimp, anemone
<u>Periclimenes longirostris</u>	shrimp, anemone
<u>Periclimenes ornatus</u>	shrimp, anemone
<u>Periclimenes paraornatus</u>	shrimp, anemone
<u>Periclimenes tunipes</u>	shrimp, anemone
CLASS Merostomata	
ORDER Xiphosura	
FAMILY Limulidae	
<u>Limulus polyphemus</u>	crab, horseshoe
PHYLUM Chordata	
CLASS Ascidiacea	
ORDER Aplousobranchia	
FAMILY Didemnidae	
<u>Lissoclinum patellum</u>	tunicates (sea squirts)
PHYLUM Cnidaria	
CLASS Anthozoa	
ORDER Actinaria	
FAMILY Actiniidae	
Actiniidae (all species in family)	anemone, sea
FAMILY Edwardsiidae	
<u>Nematostella vectensis</u>	anemone, starlet sea
FAMILY Stichodactylidae	
Stichodactylidae (all species in family)	anemone, sea
FAMILY Thalassianthidae	
Thalassianthidae (all species in family)	anemone, sea
ORDER Alcyonacea	
FAMILY Acanthogorgiidae	
Acanthogorgiidae (all species in family)	gorgonian

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Alcyoniidae Alcyoniidae (all species in family, except <u>Sarcophyton ehrenbergi</u> , <u>S. glaucum</u> , <u>S. trocheliophorum</u>)	coral, leather
FAMILY Asterozoniidae Asterozoniidae (all species in family)	coral, leather
FAMILY Briareidae Briareidae (all species in family)	gorgonian
FAMILY Clavulariidae Clavulariidae (all species in family)	polyp, star
FAMILY Cornulariidae Cornulariidae (all species in family)	polyp, star
FAMILY Ellisellidae Ellisellidae (all species in family)	gorgonian
FAMILY Gorgoniidae Gorgoniidae (all species in family)	gorgonian
FAMILY Isidadae Isidadae (all species in family)	gorgonian
FAMILY Melithaeidae Melithaeidae (all species in family)	gorgonian
FAMILY Nephtheidae Nephtheidae (all species in family)	coral, tree
FAMILY Nidaliidae Nidaliidae (all species in family)	coral, tree
FAMILY Paraclyoniidae Paraclyoniidae (all species in family)	coral, Christmas tree
FAMILY Subergordiidae Subergordiidae (all species in family)	gorgonian

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Tubiporidae Tubiporidae (all species in family)	coral, red pipe organ
FAMILY Xeniidae Xeniidae (all species in family)	coral, pulse
ORDER Antipatharia Antipatharia (all species in order)	coral, black and whip
ORDER Ceriantharia Ceriantharia (all species in order)	anemone, tube
ORDER Corallimorpharia FAMILY Discosomatidae Discosomatidae (all species in family)	anemone, mushroom in
FAMILY Ricordeidae Ricordeidae (all species in family)	anemone, mushroom
ORDER Helioporacea FAMILY Helioporidae <u>Heliopora coerulea</u>	coral, blue
ORDER Pennatulacea Pennatulacea (all species in order)	sea pen
ORDER Scleractinia FAMILY Acroporidae Acroporidae (all species in family, except <u>Acropora aspersa</u> , <u>A. austera</u> , <u>A. elseyi</u> , <u>A. formosa</u> , <u>A. microphthalma</u> , <u>A. nana</u>)	coral, staghorn
FAMILY Agariciidae Agariciidae (all species in family)	coral
FAMILY Astrocoeniidae Astrocoeniidae (all species in family)	coral

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Caryophylliidae Caryophylliidae (all species in family)	coral
FAMILY Dendrophylliidae Dendrophylliidae (all species in family)	coral
FAMILY Faviidae Faviidae (all species in family)	coral
FAMILY Fungiidae Fungiidae (all species in family)	coral, mushroom
FAMILY Merulinidae Merulinidae (all species in family)	coral
FAMILY Mussidae Mussidae (all species in family)	coral
FAMILY Oculinidae Oculinidae (all species in family)	coral
FAMILY Pectiniidae Pectiniidae (all species in family)	coral
FAMILY Pocilloporidae Pocilloporidae (all species in family)	coral
FAMILY Poritidae Poritidae (all species in family)	coral
FAMILY Siderastreidae Siderastreidae (all species in family)	coral
FAMILY Trachyphylliidae Trachyphylliidae (all species in family)	coral
ORDER Zoantharia	
FAMILY Epizoanthidae Epizoanthidae (all species in family)	polyp, button

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Parazoanthidae Parazoanthidae (all species in family)	polyp, button
FAMILY Zoanthidae Zoanthidae (all species in family)	polyp, button
CLASS Hydrozoa ORDER Hydroidea FAMILY Stylasteridae Stylasteridae (all species in family)	coral, lace
CLASS Scyphozoa ORDER Rhizostomeae Rhizostomeae (all species in order)	jellyfish
ORDER Semaestomeae Semaestomeae (all species in order)	jellyfish
PHYLUM Echinodermata CLASS Crinoidea Crinoidea (all species in class)	crinoid
CLASS Echinoidea Echinoidea (all species in class)	echinoderm
PHYLUM Echiuroida CLASS Echiura ORDER Xenopneusta FAMILY Urechidae <u>Urechis caupo</u>	worm, innkeeper

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
PHYLUM Mollusca CLASS Bivalvia ORDER Arcoida FAMILY Arcidae <u>Anadara maculosa</u>	clam, Fiji
ORDER Veneroida FAMILY Veneridae <u>Gafarium tumidum</u>	clam, Fiji
CLASS Cephalopoda ORDER Nautilida FAMILY Nautilidae <u>Nautilus belauensis</u> <u>Nautilus pompilius</u>	nautilus nautilus
ORDER Octopoda FAMILY Octopodidae <u>Octopus</u> sp. 19 [Norman 2000] <u>Octopus</u> sp. 20 [Norman 2000]	octopus, mimic octopus, "Wunderpus"
ORDER Sepioidea FAMILY Idiosepiidae <u>Idiosepius paradoxus</u> <u>Idiosepius pygmaeus</u>	squid, northern pygmy squid, two-tone pygmy
FAMILY Sepiadariidae <u>Sepioloidea lineolata</u>	squid, striped pyjama
FAMILY Sepiidae <u>Sepia</u> (all species in genus)	cuttlefish
ORDER Teuthoidea FAMILY Loliginidae <u>Sepioteuthis lessoniana</u>	squid, baby

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
CLASS Gastropoda	
ORDER Anaspidea	
FAMILY Aplysiidae	
<u>Aplysia californica</u>	sea hare, California
ORDER Mesogastropoda	
FAMILY Ampullariidae	
<u>Pila ampullacea</u>	snail, apple
<u>Pila angelica</u>	snail, apple
<u>Pila conica</u>	snail, apple
<u>Pila luzonica</u>	snail, apple
<u>Pila polita</u>	snail, apple
<u>Pila scutata</u>	snail, apple
<u>Pomacea</u> (all species in genus)	snail, apple
FAMILY Cypraeidae	
Cypraeidae (all species in family)	cowry
FAMILY Strombidae	
<u>Lambis lambis</u>	conch
<u>Strombus luhuanus</u>	conch
FAMILY Vermetidae	
<u>Dendropoma gregaria</u>	vermetid
<u>Dendropoma meroclista</u>	vermetid
<u>Dendropoma platypus</u>	vermetid
<u>Dendropoma psarocephala</u>	vermetid
<u>Petalconchus keenae</u>	vermetid
<u>Serpulorbis variabilis</u>	vermetid
ORDER Neogastropoda	
FAMILY Conidae	
<u>Conus marmoreus</u>	snail, marine
FAMILY Muricidae	
<u>Drupa morum</u>	snail, marine
<u>Drupa ricina</u>	snail, marine
ORDER Pulmonata	
FAMILY Vaginulidae	
<u>Vaginulus plebeius</u>	slug, land

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
PHYLUM Nemata (=Nematoda)	
CLASS Adenophorea	
ORDER Mermithida	
FAMILY Mermithidae	
<u>Romanomermis culicivorax</u>	nematode, mosquito
ORDER Trichocephalida	
FAMILY Trichinellidae	
<u>Trichinella spiralis</u>	nematode
FAMILY Trichuridae	
<u>Capillaria</u> (all species in genus)	nematode
CLASS Secernentea	
ORDER Ascaridida	
FAMILY Anisakidae	
<u>Anisakis</u> (all species in genus)	nematode
FAMILY Ascarididae	
<u>Ascaris lumbricoides</u>	nematode
FAMILY Dioctophymatidae	
<u>Dioctophyma renale</u>	nematode
FAMILY Toxocaridae	
<u>Toxocara</u> (all species in genus)	nematode
ORDER Camallanida	
FAMILY Dracunculidae	
<u>Dracunculus medinensis</u>	nematode
ORDER Rhabditida	
FAMILY Cephalobidae	
<u>Chiloplacus</u> (all species in genus)	nematode, free living
<u>Panagrellus</u> (all species in genus)	nematode, saprophytic
<u>Turbatrix aceti</u>	eel, vinegar
<u>Turbatrix silusae</u>	microworm
FAMILY Heterorhabditidae	
<u>Heterorhabditis bacteriophora</u>	nematode, entomogenous
<u>Heterorhabditis megides</u>	nematode, entomogenous

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Steinernematidae	
<u>Neoaplectana</u> (all species in genus)	nematode, entomogenous
<u>Steinernema</u> (all species in genus except <u>S. carpocapsae</u>)	nematode, entomogenous
ORDER Strongylida	
FAMILY Ancylostomatidae	
<u>Ancylostoma</u> (all species in genus)	nematode
FAMILY Metastrongylidae	
<u>Angiostrongylus costaricensis</u>	nematode, rat
FAMILY Strongyloididae	
<u>Strongyloides</u> (all species in genus)	nematode
FAMILY Uncinariidae	
<u>Necator americanus</u>	nematode
ORDER Tylenchida	
FAMILY Allantonematidae	
<u>Heterotylenchus autumnalis</u>	nematode, entomogenous
FAMILY Criconematidae	
<u>Meloidogyne incognita</u>	nematode, root-knot
PHYLUM Platyhelminthes	
CLASS Catenulida	
ORDER Turbellaria	
FAMILY Stenostomidae	
<u>Stenostomum</u> (all species in genus)	flatworm
CLASS Cestoda	
ORDER Cyclophyllidea	
FAMILY Dilepididae	
<u>Dipylidium caninum</u>	cestode
FAMILY Taeniidae	
<u>Taenia</u> (all species in genus)	cestode
<u>Echinococcus</u> (all species in genus)	cestode

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Pseudophyllidea FAMILY Diphyllbothriidae <u>Diphyllbothrium latum</u>	cestode
CLASS Trematoda ORDER Echinostomida FAMILY Fasciolidae <u>Fasciola hepatica</u> <u>Fasciolopsis buski</u>	trematode trematode
FAMILY Gastrodiscidae <u>Gastrodiscoides hominis</u>	trematode
ORDER Opisthorchiida FAMILY Heterophyidae <u>Heterophyes heterophyes</u>	trematode
FAMILY Opisthorchiidae <u>Opisthorchis viverrini</u>	trematode
ORDER Plagiorchiida FAMILY Paragonimidae <u>Paragonimus</u> (all species in genus)	trematode
ORDER Strigeidida FAMILY Schistosomatidae <u>Schistosoma</u> (all species in genus)	trematode

AMPHIBIANS

PHYLUM Chordata CLASS Amphibia ORDER Caudata FAMILY Ambystomidae <u>Ambystoma jeffersonianum</u> <u>Ambystoma texanum</u>	salamander, mole salamander, mole
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<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Cryptobranchidae	
<u>Andrias japonicus</u>	salamander, Japanese giant
<u>Andrias (Megalobatrachus) japonicus davidianus</u>	salamander, Chinese giant
<u>Cryptobranchus alleganiensis</u>	salamander, hellbender
FAMILY Plethodontidae	
<u>Eurycea longicauda</u>	salamander, long-tailed
FAMILY Salamandridae	
<u>Echinotriton andersoni</u>	newt, spiny
<u>Notophthalmus viridescens</u>	newt, red-spotted
ORDER Salientia	
FAMILY Bufonidae	
<u>Bufo</u> (all species in genus)	toad
FAMILY Discoglossidae	
<u>Bombina maxima</u>	toad, giant fire- bellied
<u>Bombina orientalis</u>	toad, fire-bellied
FAMILY Hylidae	
<u>Agalychnis annae</u>	treefrog, yellow-eyed
<u>Agalychnis callidryas</u>	treefrog, red-eyed
<u>Pachymedusa dacnicolor</u>	treefrog, Mexican giant
<u>Smilisca baudini smilisca</u>	treefrog, mottled (Mexican)
FAMILY Leptodactylidae	
<u>Ceratophrys calcarata</u>	frog, Columbian horned
<u>Ceratophrys ornata</u>	frog, ornate horned
<u>Leptodactylus pentadactylus</u>	bullfrog, South American
FAMILY Microhylidae	
<u>Dyscophus</u> (all species in genus)	frog, tomato
<u>Kaloula mediolineata</u>	toad, Siamese-painted toad, Malayan narrow- Mouthed
FAMILY Pelobatidae	
<u>Megophrys montana nasuta</u>	frog, Siamese-horned
<u>Megophrys monticola nasuta</u>	frog, Asian-horned

SCIENTIFIC NAMECOMMON NAME

FAMILY Pipidae

Pipa pipa

toad, Surinam

Xenopus laevis

frog, African clawed

FAMILY Ranidae

Pyxicephalus adspersusbullfrog, (African grove
crown)

FAMILY Rhacophoridae

Kassina maculata

frog, spotted running

Mantella (all species in genus)

frog, golden

Rhacophorus (Polypedates)

frog, bamboo climbing

leucomystax(gold) (white-bearded
flying)

REPTILES

PHYLUM Chordata

CLASS Reptilia

ORDER Crocodylia

FAMILY Crocodylidae

Alligator mississippiensis

alligator, American

(Prohibited for short-term
performance or exhibition in
circuses, carnivals, or state
fairs. Allowed for short-term
performance for commercial
filming, for exhibition in
government zoos, or for other
purposes permitted under section
4-71-6.5)Caiman crocodilus

caiman, spectacled

(Prohibited for short-term
performance or exhibition in
circuses, carnivals, or state
fairs. Allowed for short-term
performance for commercial
filming, for exhibition in
government zoos, or for other
purposes permitted under
section 4-71-6.5)

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Crocodylus</u> (all species in genus) (Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)	crocodile
<u>Gavialis gangeticus</u> (Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)	gavial, garial
ORDER Squamata Two non-venomous male snakes in the suborder Serpentes for exhibition in a government zoo	snakes, non-venomous
FAMILY Agamidae	
<u>Acanthosaura armata</u>	lizard, mountain horned
<u>Agama agama</u>	lizard, common agama
<u>Agama atricollis</u>	lizard, South African agama
<u>Agama stellio</u>	hardum
<u>Calotes calotes</u>	lizard, sawback agamidae
<u>Ceratophora stoderti</u>	lizard, horned agama
<u>Ctenophor (Amphibolurus) cristatus</u>	lizard, crested dragon
<u>Ctenophor (Amphibolurus) scutulatus</u>	lizard, lozenge marked dragon
<u>Draco</u> (all species in genus)	lizard, flying dragon
<u>Gonocephalus borniensis</u>	lizard, horn-headed tree dragon
<u>Hydrosaurus</u> (all species in genus)	lizard, sailfin
<u>Leiolepis belliana</u>	lizard, smooth-scaled agama, butterfly
<u>Leiolepis rubritaeniata</u>	lizard, giant ground

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Moloch horridus</u>	lizard, thorny devil
<u>Physignathus cocincinus</u>	lizard, Malayan water dragon
<u>Physignathus lesueurii</u>	lizard, brown water dragon
<u>Pogona (Amphibolurus) barbatus</u>	lizard, Australian Bearded dragon
<u>Pogona (Amphibolurus) nullarbor</u>	lizard, Nullarbor bearded dragon
<u>Pogona (Amphibolurus) vitticeps</u>	dragon, inland bearded
FAMILY Anguidae	
<u>Gerrhonotus (Elguria) multicaudata</u>	lizard, southern alligator
<u>Ophisaurus ventralis</u>	lizard, eastern glass
FAMILY Chamaeleonidae	
<u>Chamaeleo chamaeleon</u>	chameleon, common
<u>Furcifer oustaleti</u> (<u>Chamaeleo oustaleti</u>)	chameleon, Oustalet's
FAMILY Colubridae	
<u>Boiga irregularis</u> (four sterile snakes for research or training of snake detector dogs)	snake, brown tree male
FAMILY Cordylidae	
<u>Cordylus cataphractus</u>	lizard, armadillo
<u>Cordylus giganteus</u>	lizard, sun gazer
<u>Cordylus warreni</u>	lizard, Warrens girdled
<u>Gerrhosaurus flavigularis</u>	lizard, yellow-throated plated
<u>Gerrhosaurus major</u>	lizard, tawny plated
<u>Gerrhosaurus nigrolineatus</u> plated	lizard, black-lined
FAMILY Gekkonidae	
<u>Chondrodactylus angulifer</u>	gecko, sand
<u>Coleonyx elegans</u>	gecko, elegant banded
<u>Coleonyx variegatus</u>	gecko, western banded
<u>Cyrtodactylus pulchellus</u>	gecko, Malayan banded (naked-toe)
<u>Cyrtodactylus louisadensis</u>	gecko, naked-finger

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Diplodactylus spinigerus</u>	gecko, West Australian spiny-tailed (zig-zag)
<u>Eublepharis macularius</u>	gecko, leopard
<u>Gehyra mutilata</u> (Peropus)	gecko, stump-toed
<u>Gekko gekko</u>	gecko, tokay
<u>Gekko stentor</u>	gecko, giant
<u>Gymnodactylus penguensis zebraic</u>	gecko, leopard's (bent-toe)
<u>Hemidactylus frenatus</u>	gecko, house
<u>Hemidactylus garnoti</u>	gecko, Indo-Pacific
<u>Hemiphyllodactylus typus</u>	gecko, tree
<u>Hemitheconyx caudicinctus</u>	gecko, African fat-tailed
<u>Homopholus walbergi</u>	gecko, Wallberg's velvety
<u>Nephrurus</u> (all species in genus)	gecko, knob-tailed
<u>Oedura lesueuri</u>	gecko, Lesueur's velvet
<u>Oedura marmorata</u>	gecko, velvet
<u>Oedura robusta</u>	gecko, robust velvet
<u>Pachydactylus bibroni</u>	gecko, Bibron's
<u>Phelsuma abbotti</u>	gecko, Aldabra day
<u>Phelsuma cepediana</u>	gecko, blue-tailed day
<u>Phelsuma guimbeaui</u>	gecko, orange-spotted day
<u>Phelsuma laticauda</u>	gecko, gold dust day
<u>Phelsuma madagascariensis</u>	gecko, Madagascar day
<u>Phelsuma ornata</u>	gecko, Reunion Island day (ornate day)
<u>Phyllurus cornutus</u>	gecko, northern leaf-tailed
<u>Phyllurus platurus</u>	gecko, southern leaf-tailed
<u>Ptychozoon kuhli</u>	gecko, flying
<u>Ptychozoon lionotum</u>	gecko, flying
<u>Rhacodactylus leachianus</u>	gecko, New Caledonia giant
<u>Thecadactylus rapicauda</u>	gecko, turnip-tailed
<u>Underwoodsaurus mili</u>	gecko, turnip-tailed
<u>Uroplatus</u> (all species in genus)	gecko, flat-tailed
FAMILY Iguanidae	
<u>Anolis equestris</u>	lizard, knight anole
<u>Basiliscus basiliscus</u>	lizard, brown basilisk
<u>Basiliscus plumifrons</u>	lizard, green basilisk (double crested)
<u>Basiliscus vittatus</u>	lizard, banded basilisk

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Brachylophus fasciatus</u>	iguana, Tongan (Fiji banded)
<u>Callisaurus draconoides</u>	lizard, zebra-tailed
<u>Corytophanes cristatus</u>	iguana, helmeted
<u>Crotaphytus collaris</u>	lizard, collared
<u>Ctenosaura similis</u>	iguana, spiny-tailed
<u>Cyclura macleani</u>	iguana, Cuban (rhinoceros)
<u>Dipsosaurus dorsalis</u>	iguana, desert
<u>Enyaliosaurus quinquecarinatus</u>	iguana, club tail
<u>Gambelia wislizeni</u>	lizard, long-nosed leopard
<u>Holbrookia maculata</u>	lizard, lesser earless
<u>Iguana</u> (all species in genus)	iguana
<u>Phrynosoma</u> (all species in genus)	lizard, horned (horned toad)
<u>Sauromalus obesus</u>	lizard, chuckwalla
<u>Sauromalus varius</u>	lizard, chuckwalla
<u>Sceloporus clarki</u>	lizard, Clark's spiny
<u>Sceloporus jarrovi</u>	lizard, Yarrow's spiny
<u>Sceloporus magister</u>	lizard, desert spiny
<u>Sceloporus occidentalis</u>	lizard, western fence
<u>Sceloporus orcutti</u>	lizard, granite spiny
<u>Urosaurus ornatus</u>	lizard, tree
<u>Uta stansburiana</u>	lizard, side-blotched
FAMILY Lacertidae	
<u>Lacerta lepida</u>	lizard, jeweled lacerta
<u>Lacerta sicula</u>	lizard, European wall
<u>Lacerta viridis</u>	lizard, green
<u>Takydromus sexlineatus</u>	lizard, long-tailed (oriental six-lined runner)
FAMILY Pygopodidae	
<u>Delma impar</u>	lizard, smooth-scaled scalefoot
<u>Lialis burtonis</u>	lizard, Burton's snake
<u>Pygopus lepidopodus</u>	lizard, common scale-foot
FAMILY Scincidae	
<u>Acontias percivali</u>	lizard, East African legless
<u>Corucia zebrata</u>	skink, green tree
<u>Cryptoblepharus boutoni</u>	skink, snake-eyed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Cyclodomorphus (Tiliqua) branchialis</u>	skink, West Australian short-limbed
<u>Dasia smaragdina</u>	skink, spotted green tree
<u>Egernia cunninghami</u>	skink, Cunningham's
<u>Egernia stokesii</u>	skink, gidgee
<u>Emoia cyanura</u>	skink, blue-tailed slender
<u>Eumeces obsoletus</u>	skink, Great Plains
<u>Leiolopisma metallicum</u>	skink, metallic
<u>Lipinia noctua</u>	skink, moth
<u>Mabuya capensis</u>	skink, South African
<u>Mabuya capensis</u>	skink, South African blue-tailed
<u>Mabuya macularia</u>	skink, orange-throated
<u>Omolepida (Tiliqua) branchialis</u>	skink, Australian short-limbed
<u>Tiliqua nigrolutea</u>	skink, blotched- blue-tongued
<u>Tiliqua occipitalis</u>	skink, West Australian blue-tongued
<u>Tiliqua scincoides</u>	skink, blue-tongued
<u>Trachysaurus rugosus (Tiliqua rugosus)</u>	skink, shingle back
FAMILY Teiidae	
<u>Ameiva ameiva</u>	lizard, jungle runners
<u>Callopistes maculatus</u>	lizard, monitor tegu
<u>Cnemidophorus tessellatus</u>	lizard, checkered whiptail
<u>Cnemidophorus tigris</u>	lizard, western whiptail
<u>Tubinambis nigropunctatus</u>	lizard, golden tegu
<u>Tupinambis rufescens</u>	lizard, tegu red
<u>Tupinambis teguixin</u>	lizard, tegu black
FAMILY Varanidae	
<u>Varanus acanthurus</u>	monitor, spiny-tailed
<u>Varanus bengalensis</u>	monitor, Bengal
<u>Varanus dumerili</u>	monitor, Dumeril's
<u>Varanus exanthematicus</u>	monitor, savannah
<u>Varanus giganteus</u>	monitor, Perentee
<u>Varanus gouldi</u>	monitor, Gould's
<u>Varanus indicus</u>	monitor, Pacific
<u>Varanus komodoensis</u>	monitor, komodo
<u>Varanus niloticus</u>	monitor, Nile
<u>Varanus salvadori</u>	monitor, crocodile
<u>Varanus salvator</u>	monitor, water

SCIENTIFIC NAMECOMMON NAMEVaranus storrimonitor, pygmy (Storr's
dwarf)Varanus varius

monitor, variegated

ORDER Testudines

FAMILY Chelidae

Chelus fimbriatus

turtle, mata mata

Emydura albertisiturtle, New Guinea snake
neckPodocnemis unifilisturtle, yellow-spotted
Amazon

FAMILY Chelydridae

Chelydra serpentina

turtle, snapping

Macroclermys temminckiturtle, alligator
snapping

FAMILY Emydidae

Heosemys grandis

turtle, Asian temple

FAMILY Pelomedusidae

Pelomedusa subrufa olivacera

turtle, helmeted

Pelusios (all species in genus)terrapins, African
Hinged

FISHES

PHYLUM Chordata

CLASS Chondrichthyes

ORDER Carcharhiniformes

FAMILY Carcharhinidae

Carcharhinus amblyrhynchos

shark, gray reef

Carcharhinus galapagensis

shark, Galapagos

Carcharhinus longimanus

shark, oceanic whitetip

Carcharhinus limbatus

shark, blacktip

CLASS Osteichthyes

ORDER Acipenseriformes

FAMILY Acipenseridae

Acipenser baeri

sturgeon, Siberian

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Acipenser brevirostrum</u>	sturgeon, shortnose
<u>Acipenser fulvescens</u>	sturgeon, lake
<u>Acipenser guldenstadti</u>	sturgeon, Russian
<u>Acipenser guldenstadti</u> x <u>Huso huso</u>	sturgeon, Oceber
<u>Acipenser medirostris</u>	sturgeon, green
<u>Acipenser oxyrhynchus</u>	sturgeon, Atlantic
<u>Acipenser ruthenus</u>	sturgeon, Siberian; sterlet
<u>Acipenser ruthenus</u> x <u>Huso huso</u>	sturgeon, Bester
<u>Acipenser stellatus</u>	sturgeon, Sevruga (starry)
<u>Huso huso</u>	sturgeon, Beluga
<u>Scaphirhynchus albus</u>	sturgeon, pallid
<u>Scaphirhynchus platorhynchus</u>	sturgeon, shovelnose
FAMILY Polyodontidae	
<u>Polyodon spathula</u>	paddlefish
ORDER Atheriniformes	
FAMILY Atherinidae	
<u>Menidia beryllina</u>	silverside
ORDER Cypriniformes	
FAMILY Cyprinidae	
<u>Notemigonus crysoleucas</u>	minnow, golden shiner
<u>Pimephales promelas</u>	minnow, fathead
FAMILY Erythrinidae	
<u>Hoplias malabaricus</u>	tiger fish
ORDER Perciformes	
FAMILY Mugilidae	
<u>Mugil cephalus</u>	mullet, striped
FAMILY Nototheniidae	
<u>Dissostichus mawsoni</u>	cod, Antarctic
<u>Notothenia</u> (all species in genus)	cod, Antarctic
FAMILY Siganidae	
<u>Lo magnificentus</u>	foxface, white (rabbitfish)
<u>Lo uspi</u>	foxface, bicolor (rabbitfish)
<u>Lo vulpinus</u>	lo, foxface (rabbitfish)

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Siganus corallinus</u>	rabbitfish, spotted
<u>Siganus lineatus</u>	goldenspot
<u>Siganus puellus</u>	rabbitfish, blueline
<u>Siganus vermiculatus</u>	rabbitfish, vermiculated
<u>Siganus vermiculatus</u>	rabbitfish, spinefoot
<u>Siganus virgatus</u>	rabbitfish, barhead
ORDER Siluriformes	
FAMILY Clariidae	
<u>Clarias fuscus</u>	catfish, Chinese
ORDER Synbranchiformes	
FAMILY Synbranchidae	
<u>Monopterus albe</u>	eel, rice paddy

BIRDS

(Taxonomy after Sibley and Monroe 1990)

PHYLUM Chordata	
CLASS Aves	
ORDER Anseriformes	
FAMILY Anatidae	
<u>Anas platyrhynchos</u>	duck, mallard
FAMILY Anhimidae	
<u>Chauna chavaria</u>	screamer, black-necked
ORDER Apterygiformes	
FAMILY Apterygidae	
<u>Apteryx australis</u>	kiwi, common zoi (brown)
ORDER Caprimulgiformes	
FAMILY Podargidae	
<u>Batrachostomus javensis</u>	frogmouth, Javan
<u>Podargus strigoides</u>	frogmouth, tawny

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Casuariiformes	
FAMILY Casuariidae	
<u>Casuarus</u> (all species in genus)	cassowarie
FAMILY Dromaiidae	
<u>Dromaius novaehollandiae</u>	emu, common
ORDER Charadriiformes	
FAMILY Burhinidae	
<u>Burhinus bistratus</u>	thick-knee, double-striped
<u>Burhinus capensis</u>	cape thick-knee
FAMILY Charadriidae	
<u>Pluvialis dominica</u>	plover, lesser golden
<u>Vanellus armatus</u>	plover, blacksmith
<u>Vanellus spinosus</u>	plover, African spur-wing (spur-winged lapwing)
FAMILY Glareolidae	
<u>Glareola pratincola</u>	pratincoles, collared
FAMILY Haematopidae	
<u>Haematopus ostralegus</u>	oyster catcher, European
FAMILY Jacanidae	
<u>Actophilornis africana</u>	jacana, African
FAMILY Laridae	
<u>Anous stolidus</u>	tern, brown noddy
<u>Gygis alba</u>	tern, fairy
<u>Larosterna inca</u>	tern, Inca
<u>Larus atricilla</u>	gull, laughing
<u>Larus californicus</u>	gull, California
<u>Larus heermanni</u>	gull, Heermans
<u>Procelsterna cerulea</u>	noddy, blue-grey
<u>Sterna fuscata</u>	tern, sooty
<u>Sterna sumatrana</u>	tern, black-naped
<u>Thalasseus maximus</u>	tern, royal
FAMILY Recurvirostridae	
<u>Himantopus himantopus</u>	stilt, black-winged
<u>Himantopus mexicanus</u>	stilt, black-necked

SCIENTIFIC NAMECOMMON NAME

FAMILY Scolopacidae

Limnodromus griseus

dowitcher, short-billed

ORDER Ciconiiformes

FAMILY Ardeidae

Ardea herodias

heron, great blue

Ardeola (Bubulcus) ibis

egrets, cattle

Egretta alba

egret, great

Egretta garzetta

egret, little

Egretta intermedia

egret, plumed

Egretta thula

egret, snowy

Hydranassa caerulea

heron, little blue

Hydranassa tricolor

heron, tricolored

Tigrisoma lineatum

heron, rufescent tiger

FAMILY Ciconiidae

Anastomus lamelligerus

stork, open-billed

Ephippiorhynchus asiaticus

stork, black-neck

Ephippiorhynchus senegalensis

stork, saddle-bill

Jabiru mycteria

jabiru

Leptoptilos crumeniferus

stork, Marabou

FAMILY Scopidae

Scopus umbetta

hammerkop (hammerhead)

FAMILY Threskiornithidae

Carphibis spinicollis

ibis, straw-necked

Eudocimus albus

ibis, American white

Plegadis falcinellus

ibis, glossy

ORDER Coliiformes

FAMILY Coliidae

Colius striatus

mousebird, speckled

ORDER Columbiformes

FAMILY Columbidae

Caloenas nicobarica

pigeon, Nicobar

Didunculus strigirostris

pigeon, tooth-billed

Ducula aenea

pigeon, green imperial

Ducula bicolor

pigeon, pied (imperial)

Ducula myristicivora

pigeon, New Guinea

imperial

Geopelia humeralis

dove, bar-shouldered

Goura cristata

pigeon, common crowned

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Leucosarcia melanoleuca</u>	pigeon, wonga
<u>Macropygia phasianella</u>	dove, slender-bill cuckoo
<u>Macropygia unchall</u>	dove, bar-tailed cuckoo
<u>Otidiphaps nobilis</u>	pigeon, pheasant (magnificent ground)
<u>Ptilinopus jambu</u>	pigeon, jambu fruit
<u>Ptilinopus melanospila</u>	pigeon, black naped fruit
<u>Ptilinopus perousii</u>	dove, many colored fruit
<u>Ptilinopus roseicapilla</u>	dove, Mariana fruit
<u>Ptilinopus victor</u>	dove, orange
<u>Streptopelia risoria</u>	dove, ringed turtle
<u>Streptopelia senegalensis</u>	dove, laughing
<u>Turtur chalcospilos</u>	dove, wood emerald- spotted
<u>Uropelia campestris</u>	dove, long-tailed ground
FAMILY Pteroclididae	
<u>Pterocles indicus</u>	sandgrouse, painted
<u>Syrrhaptes paradoxus</u>	sandgrouse, pallas
ORDER Coraciiformes	
FAMILY Alcedinidae	
<u>Alcedo cristata</u>	kingfisher, malchite
<u>Ceyx erithacus</u>	kingfisher, Indian forest
<u>Ceyx rufidorsus</u>	kingfisher, red-backed
<u>Dacelo gigas</u>	kookabura, laughing
<u>Halcyon chloris</u>	kingfisher, white- collared
<u>Halcyon cinnamomina</u>	kingfisher, Micronesian
<u>Halcyon leucocephala</u>	kingfisher, grey-headed
<u>Halcyon pileata</u>	kingfisher, black-capped
<u>Halcyon recurvirostris</u>	kingfisher, flat-billed
<u>Tanysiptera galatea</u>	kingfisher, common paradise
FAMILY Bucerotidae	
<u>Aceros leucocephalus</u>	hornbill, wrinkled
<u>Aceros nipalensis</u>	hornbill, rufous-necked
<u>Aceros plicatus</u>	hornbill, Papuan (Blyths)
<u>Aceros undulatus</u>	hornbill, wreathed
<u>Anthracoceros coronatus</u>	hornbill, pied
<u>Anthracoceros malabaricus</u>	hornbill, northern pied

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Buceros bicornis</u>	hornbill, great
<u>Buceros hydrocorax</u>	hornbill, rufous
<u>Buceros rhinoceros silvestris</u>	hornbill, rhinoceros
<u>Bucorvus abyssinicus</u>	hornbill, Abyssinian ground
<u>Bucorvus leadbeateri</u>	hornbill, African ground
<u>Penelopides exarhatus</u>	hornbill, Celebean
<u>Tockus erythrorhynchus</u>	hornbill, red-billed
FAMILY Coraciidae	
<u>Coracias benghalensis</u>	roller, Indian
<u>Coracias caudata</u>	roller, lilac-breasted
FAMILY Meropidae	
<u>Merops nubicus</u>	bee-eater, carmine
<u>Merops philippinus</u>	bee-eater, brown- breasted
FAMILY Momotidae	
<u>Momotus momota</u>	motmot, blue-crowned
FAMILY Phoeniculidae	
<u>Phoenicilus purpureus</u>	hoopoe, green wood
FAMILY Upupidae	
<u>Upupa epops</u>	hoopoe, common
ORDER Cuculiformes	
FAMILY Cuculidae	
<u>Carpococcyx renauldi</u>	cuckoo, red-billed ground
<u>Centropus sinensis</u>	coucal, greater
<u>Rhopodytes tristis</u>	malkoha, greater green- billed
FAMILY Musophagidae	
<u>Corythaixoides leucogaster</u>	go-away bird, white- bellied
<u>Tauraco erythrolophus</u>	turaco, red-crested
<u>Tauraco leucolophus</u>	turaco, white-crested
<u>Tauraco livingstonii</u>	turaco, Livingstone's

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Falconiformes	
FAMILY Accipitridae	
<u>Aegypius monachus</u>	vulture, cinereous
<u>Aquila</u> (all species in genus)	eagle
<u>Buteo jamaicensis</u>	hawk, red-tailed
<u>Buteo solitarius</u>	hawk, Hawaiian
<u>Gyps africanus</u>	vulture, white-backed
<u>Gyps bengalensis</u>	vulture, white-backed
<u>Haliaeetus</u> (all species in genus)	eagle
<u>Haliastur indus</u>	kite, Brahminy
<u>Harpia harpyja</u>	eagle, harpy
<u>Harpyopsis novaegineae</u>	eagle, New Guinea harpy
<u>Heterospizias meridionalis</u>	hawk, savana
<u>Necrosyrtes monachus</u>	vulture, hooded
<u>Neophron percnopterus</u>	vulture, Egyptian
<u>Parabuteo unicinctus harrisi</u>	hawk, Harris's (bay-winged)
<u>Pithecophaga jefferyi</u>	eagle, monkey-eating
<u>Trigonoceps occipitalis</u>	vulture, white-headed
FAMILY Cathartidae	
<u>Cathartes aura</u>	vulture, turkey
<u>Coragyps atratus</u>	vulture, black
<u>Sarcorhamphus papa</u>	vulture, king
FAMILY Falconidae	
<u>Falco</u> (all species in genus)	falcon
<u>Herpetotheres</u> (all species in genus)	falcon
<u>Polihierax semitorquatus</u>	falcon, African pigmy
<u>Polyborus</u> (all species in genus)	caracara
FAMILY Sagittariidae	
<u>Sagittarius serpentarius</u>	secretary bird
ORDER Galliformes	
FAMILY Cracidae	
<u>Crax mitu</u>	curassow, razor-billed
<u>Penelope pileata</u>	guan, white crested
<u>Penelope purpurascens</u>	guan, crested
FAMILY Megapodiidae	
<u>Aepyodius arfakianus</u>	turkey, wattled brush
<u>Alectura lathamii</u>	turkey, brush
<u>Megapodius freycinet</u>	scrubfowl, common
<u>Megapodius laperouse</u>	fowl, Micronesia scrub

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Megapodius pritchardii</u>	megapode, Niuafu'ou
FAMILY Phasianidae	
<u>Caloperdix oculatea</u>	partridge, ferruginous wood
<u>Guttera edouardi</u>	fowl, crested Guinea
<u>Meleagris ocellata</u>	turkey, ocellated
ORDER Gruiformes	
FAMILY Eurypygidae	
<u>Eurypyga helias</u>	bittern, sun
FAMILY Gruidae	
<u>Grus japonensis</u>	crane, Manchurian
<u>Grus vipio</u>	crane, white-naped
FAMILY Psophiidae	
<u>Psophia crepitans</u>	trumpeter, common
<u>Psophia leucoptera</u>	trumpeter, white-winged
<u>Psophia viridis</u>	trumpeter, green-winged
FAMILY Rallidae	
<u>Aramides cajanea</u>	rail, grey-necked wood
<u>Limnocorax flavirostra</u>	crake, black
<u>Porphyrio poliocephalus</u>	moorhen
<u>Porphyrio pulverulentus</u>	pukeko
<u>Rallus owstoni</u>	rail, Guam
<u>Rallus philippensis</u>	rail, banded
ORDER Passeriformes	
FAMILY Alaudidae	
<u>Alauda arvensis</u>	skylark
<u>Eremopterix keycioareua</u>	lark, Fishers sparrow
FAMILY Artamidae	
<u>Artamus leucorhynchus</u>	swallow, white-breasted wood
FAMILY Bombycillidae	
<u>Ptilogonys cinereus</u>	flycatcher, gray silky
FAMILY Campephagidae	
<u>Coracina pectoralis</u>	shrike, white-breasted cuckoo

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Coracina tenuirostris</u>	bird, cicada
<u>Prionops plumata</u>	shrike, straight-crested helmet
FAMILY Corvidae	
<u>Cissa chinensis</u>	magpie, green
<u>Corvus albus</u>	crow, pied
<u>Corvus corax</u>	raven
<u>Corvus kubaryi</u>	crow, Mariana
<u>Cyanocitta cristata</u>	jay, blue
<u>Cyanocitta stelleri</u>	jay, Stellers
<u>Cyanocorax chrysops</u>	jay, pileated (plush crested)
<u>Platylophus galericulatus</u>	jay, crested
<u>Urocissa erythrorhyncha</u>	magpie, blue (red billed)
FAMILY Cotingidae	
<u>Cephalopterus penduliger</u>	umbrella bird, long- wattled
<u>Rupicola peruviana</u>	cock-of-the-rock, Andean
<u>Procnis nudicollis</u>	bellbird, naked throated
FAMILY Dicruridae	
<u>Dicrurus remifer</u>	drongo, lesser racket- tailed
FAMILY Emberizidae	
<u>Paroaria gularis pheucticus</u>	cardinal, black-throated (red-capped)
<u>Passerina cyanoides</u>	grosbeak, blue-back
<u>Pheucticus ludovicianus</u>	grosbeak, rose-breasted
<u>Pheucticus melanocephalus</u>	grosbeak, black-headed
FAMILY Estrildidae	
<u>Estrilda rhodopyga</u>	waxbill, crimson-rumped
<u>Lonchura maja</u>	nun, white-headed; white-headed munia
<u>Ortygospiza atricollis</u>	finch, quail
FAMILY Eurylaimidae	
<u>Calyptomena viridis</u>	broadbill, green
FAMILY Icteridae	
<u>Icterus chrysocephalus</u>	oriole, moriche
<u>Icterus icterus</u>	troupial
<u>Psarocolius decumanus</u>	oropendola, crested

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Irenidae	
<u>Chloropsis aurifrons</u>	leafbird, golden-fronted
FAMILY Mimidae	
<u>Dumetella carolinensis</u>	catbird, common
<u>Mimus gilvus</u>	mockingbird, tropical
FAMILY Motacillidae	
<u>Motacilla flava</u>	wagtail, yellow
FAMILY Muscicapidae	
<u>Acrocephalus luscini</u>	warbler, nightingale reed
<u>Acrocephalus syrinx</u>	warbler, Caroline Islands reed
<u>Cettia subulata</u>	warbler, bush
<u>Cyornis tickelliae</u>	flycatcher, Tickell's blue
<u>Erithacus calliope</u>	rubythroat, Siberian
<u>Erithacus komadori</u>	robin, Temminck's
<u>Erithacus obscurus</u>	robin, black-throated
<u>Eumyias thalassina</u>	flycatcher, verditer
<u>Ficedula narcissina</u>	flycatcher, narcissus
<u>Garrulax leucolophus</u>	thrush, white-crested laughing
<u>Garrulax milnei</u>	thrush, red-tailed laughing
<u>Garrulax monileger</u>	thrush, lesser necklaced laughing
<u>Metabolus regensis</u>	monarch, Truk
<u>Monarcha godeffroyi</u>	monarch, Yap
<u>Monarcha takatsuakasae</u>	monarch, Tinian
<u>Myadestes obscurus</u>	solitaire, brown-backed
<u>Myadestes townsendi</u>	solitaire, Townsend's
<u>Myiagra azureocapilla</u>	flycatcher, blue-crested
<u>Myiagra erythrope</u>	broadbill, Palau
<u>Myiophoneus caeruleus</u>	thrush, blue whistling
<u>Niltava sundara</u>	niltava, rufous-bellied
<u>Pachycephala pectoralis</u>	whistler, golden
<u>Phoenicurus aureus</u>	redstart, Daurian
<u>Rhipidura lepida</u>	fantail, Palau
<u>Rhipidura rufifrons</u>	fantail, rufous
<u>Turdus migratorius</u>	robin, American
FAMILY Oriolidae	
<u>Oriolus chinensis</u>	oriole, black-naped

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Paradisaeidae	
<u>Astrapia mayeri</u>	astrapia, ribbon-tailed
<u>Astrapia stephaniae</u>	bird-of-paradise, Princess Stephanie's
<u>Cicinnurus regius</u>	bird-of-paradise, king
<u>Diphyllodes magnificus</u>	bird-of-paradise, magnificent
<u>Diphyllodes respublica</u>	bird-of-paradise, Wilson's
<u>Lophorina superba</u>	bird-of-paradise, superb
<u>Paradisaea apoda</u>	bird-of-paradise, greater
<u>Paradisaea guilielmi</u>	bird-of-paradise, white plumed
<u>Paradisaea minor</u>	bird-of-paradise, lesser
<u>Paradisaea rubra</u>	bird-of-paradise, red
<u>Paradisaea rudolphi</u>	bird-of-paradise, blue
<u>Paradisaea raggiana</u>	bird-of-paradise, Count Raggi's
<u>Parotia carolae</u>	bird-of-paradise, Queen Carol's
<u>Parotia lawesii</u>	parotia, Lawe's
<u>Ptiloris magnificus</u>	rifle bird, magnificent
<u>Seleucidis melanoleuca</u>	bird-of-paradise, twelve-wired
FAMILY Pipridae	
<u>Chiroxiphia caudata</u>	manakin, swallow-tailed
FAMILY Pittidae	
<u>Pitta moluccensis</u>	pitta, blue-winged
<u>Pitta sordida</u>	pitta, hooded
<u>Pitta steerii</u>	pitta, steers
FAMILY Ploceidae	
<u>Bubalornis albirostris</u>	weaver, buffalo
<u>Dinemellia dinemelli</u>	weaver, white-headed buffalo
<u>Plocepasser mahali</u>	weaver, white-browed sparrow
FAMILY Ptilonorhynchidae	
<u>Amblyornis macgregoriae</u>	bowerbird, Macgregor's
<u>Chlamydera cerviniventris</u>	bowerbird, fawn-breasted
<u>Ptilonorhynchus violaceus</u>	bowerbird, satin

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Sturnidae	
<u>Buphagus africanus</u>	oxpecker, yellow-billed
<u>Cinnyricinclus leucogaster</u>	starling, violet-backed
<u>Cosmopsarus regius</u>	starling, golden-breasted
<u>Lamprotornis purpureus</u>	starling, purple glossy
<u>Lamprotornis purpuropterus</u>	starling, Ruppell's long-tailed
<u>Leucopsar rothschildi</u>	mynah, Bali
<u>Spreo superbus</u>	starling, superb
<u>Sturnus nigricollis</u>	starling, black collared
FAMILY Thraupidae	
<u>Piranga olivacea</u> (males only)	tanager, scarlet
<u>Ramphocelus dimidiatus</u> (males only)	tanager, crimson-backed
<u>Thraupis episcopus</u> (males only)	tanager, blue-grey
FAMILY Tinamidae	
<u>Eudromia formosa</u>	tinamou, crested
FAMILY Zosteropidae	
<u>Zosterops palpebrosa</u>	white-eye, oriental
ORDER Pelecaniformes	
FAMILY Pelecanidae	
<u>Pelecanus</u> (all species in genus)	pelican
FAMILY Phalacrocoracidae	
<u>Phalacrocorax carbo</u>	cormorant, common
ORDER Piciformes	
FAMILY Capitonidae	
<u>Lybius</u> (all species in genus)	barbets
<u>Megalaima armillaris</u>	barbett, Armott's (blue crowned)
<u>Megalamima asiatica</u>	barbet, blue-throated
<u>Semnornis ramphastinus</u>	barbet, toucan
<u>Trachyphonus erythrocephalus</u>	barbet, red and yellow
FAMILY Indicatoridae	
<u>Indicator indicator</u>	honeyguide, black-throated
FAMILY Picidae	
<u>Chrysocolaptes lucidus</u>	woodpecker, greater goldenbacked

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Picoides canicapillus</u>	woodpecker, gray-capped
FAMILY Rhamphastidae	
<u>Pteroglossus beauharnaesii</u>	aracari, curl-crested
<u>Ramphastos ambiguus swainsonii</u>	toucan, bicolored-billed
<u>Ramphastos discolorus</u>	toucan, red-breasted
<u>Ramphastos sulfuratus</u>	toucan, sulfur breasted,
<u>sulfuratus</u>	north kneel-bill
<u>Ramphastos toco cuvieri</u>	toucan, Cuvier's
<u>Ramphastos toco toco</u>	toucan, north toco
<u>Ramphastos vitellinus ariel</u>	toucan, ariel channel-
	bill
<u>Ramphastos vitellinus</u>	toucan, sulphur and
<u>vitellinus</u>	white, north channel-
	bill
<u>Selenidera maculirostris</u>	toucanet, spot-billed
ORDER Procellariiformes	
FAMILY Procellariidae	
<u>Puffinus pacificus</u>	shearwater, wedge-tailed
ORDER Psittaciformes	
FAMILY Loriidae	
<u>Chalcopsitta sintillata</u>	lory, yellow streaked
<u>Chamosyna papou goliathina</u>	lory, central Stella's
<u>Trichoglossus haematodus</u>	lory, rainbow
<u>Trichoglossus johnstoniae</u>	lorikeet, Johnstone's
<u>Trichoglossus rubiginosus</u>	lory, Ponape
<u>Vini peruviana</u>	lory, Tahitian
FAMILY Psittacidae	
<u>Brotogeris jugularis</u>	parakeet, orange-chinned
<u>Eunymphicus cornutus</u>	parakeet, horned
<u>Lathamus discolor</u>	parrot, swift
<u>Loriculus galgulus</u>	lory, blue-crowned
<u>Loriculus philippensis</u>	parrot, Philippine
	hanging
<u>Nandayus nenday</u>	conure, nanday
<u>Nestor notabilis</u>	kea
<u>Prospoeia tabuensis</u>	parrot, red shining
<u>Psittaculirostris</u> (all species in	parrot, fig
genus)	
<u>Psitttrichas fulgidus</u>	parrot, Pesquets

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Rheiformes	
FAMILY Rheidae	
<u>Rhea americana</u>	rhea, common (greater)
ORDER Strigiformes	
FAMILY Strigidae	
<u>Asio flammeus</u>	owl, short-eared
<u>Bubo virginianus</u>	owl, great horned
<u>Glaucidium brodiei</u>	owlet, pygmy
<u>Scotopelia peli</u>	owl, Pell's fishing
<u>Speotyto cunicularia</u>	owl, burrowing
<u>Strix varia</u>	owl, barred
FAMILY Tytonidae	
<u>Tyto alba</u>	owl, common barn
ORDER Trogoniformes	
FAMILY Trogonidae	
<u>Pharomachrus auriceps</u>	quetzal, golden-headed
<u>Pharomachrus mocinno</u>	quetzal, resplendent
<u>Harpactes erythrocephalus</u>	trogon, red-headed
<u>Trogon viridis</u>	trogon, white-tailed
ORDER Apodiformes	
FAMILY Trochilidae	
Trochilidae (sexually dimorphic males only)	hummingbirds
ORDER Psittaciformes	
FAMILY Loriidae	
<u>Eos bornea</u> (males only)	lory, red
<u>Eos squamata</u> (males only)	lory, violet-necked
<u>Lorius lory</u> (males only)	lory, black-capped

SCIENTIFIC NAMECOMMON NAME

MAMMALS

PHYLUM Chordata

CLASS Mammalia

ORDER Artiodactyla

FAMILY Bovidae

Bovidae (all species in family
except Bubalus bubalis)wild cattle, buffalo,
antelopes, etc.

FAMILY Camelidae

Camelus bactrianus

camel, Bactrian

Camelus dromedarius

camel

FAMILY Cervidae

Cervus nippon

deer, sika

Dama dama (=Cervus dama)deer, white European
fallowMuntiacus muntjak

deer, Indian muntjac

Muntiacus reevesi

muntjac, Reeve's

Odocoileus hemionus

deer, black-tailed

FAMILY Girrafidae

Okapia johnstoni

okapi

FAMILY Hippopotamidae

Choeropsis liberiensis

hippo, pygmy

(Prohibited for short-term
performance or exhibition in
circuses, carnivals, or state
fairs. Allowed for short-term
performance for commercial
filming, for exhibition in
government zoos, or for other
purposes permitted under section
4-71-6.5)Hippopotamus amphibius

hippopotamus

(Prohibited for short-term
performance or exhibition in
circuses, carnivals, or state
fairs. Allowed for short-term
performance for commercial
filming, for exhibition in
government zoos, or for other
purposes permitted under section
4-71-6.5)

SCIENTIFIC NAMECOMMON NAME

FAMILY Suidae

Babyrousa babyrousa
Phacochoerus aethiopicus
Sus barbatus

barbirusa
hog, wart
pig, bearded

FAMILY Tayassuidae

Tayassu tajacu

peccary, collared

ORDER Carnivora

FAMILY Canidae

Lycaon pictus
Otocyon megalotis
Vulpes (all species in genus)

dog, African hunting
fox, bat-eared
fox

FAMILY Felidae

Acinonyx jubatus

cheetah

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

Felis caracal (=Lynx caracal)

caracal

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

Felis pardalis

ocelot

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
zoos, or for other purposes permitted under section 4-71-6.5)	
<u>Felis serval</u> (Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)	serval
<u>Felis wiedii</u> (Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)	margay
<u>Panthera leo</u> (Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)	lion
<u>Panthera nebulosa (=Neofelis nebulosa)</u> (Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section	clouded leopard

SCIENTIFIC NAMECOMMON NAME

4-71-6.5)

Panthera onca

jaguar

Panthera pardus

leopard

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

Panthera tigris

tiger

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

Profelis concolor (=Felis concolor)puma, (cougar),
(mountain lion)

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

FAMILY Hyaenidae

Crocuta crocuta

hyena, spotted

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section

SCIENTIFIC NAMECOMMON NAME

4-71-6.5)

FAMILY Mustelidae

Aonyx cinerea

otter, Asian small-clawed

Lutra canadensis

otter, land river

Mephitis (all species in genus)

skunk

Mustela lutreola

mink

Mustela putorius furo

ferret

Mustela vison

mink

Pteronura brasiliensis

otter, giant

FAMILY Procyonidae

Ailurus fulgens

panda, red

Nasua (all species in genus)

coati

Potos flavus

kinkajou

Procyon lotor

raccoon

FAMILY Ursidae

Helarctos malayanus

sunbear, Malayan

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

Melursus ursinus

bear, sloth

(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

Ursus (all species in genus)

bear

(Prohibited for short-term performance or exhibition in

SCIENTIFIC NAMECOMMON NAME

circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)

FAMILY Viverridae

Arctictis binturongSuricata suricattaHerpestes auropunctatus

binturong

meerkat, slender-tailed

mongoose, small Indian

ORDER Diprotodontia (=Marsupialia)

FAMILY Didelphidae

Didelphis marsupialis

opossum

FAMILY Macropodidae

Aepyrymnus (all species in genus)

rat-kangaroo, Rufous

Bettongia (all species in genus)

rat-kangaroo

Caloprymnus (all species in genus)

rat-kangaroo, desert

Dendrolagus (all species in genus)

tree-kangaroo

Dorcopsis (all species in genus)

wallaby, New Guinea forest

Dorcopsulus (all species in genus)

wallaby, New Guinea mountain

Hypsiprymnodon (all species in genus)

rat-kangaroo, musk in

Lagorchestes (all species in genus)

wallaby, hare

Lagostrophus (all species in genus)

wallaby, banded hare

Macropus (all species in genus)

wallaby (kangaroo)

Megaleia (all species in genus)

kangaroo, red

Onychogalea (all species in genus)

wallaby, nail-tailed

Peradorcas (all species in genus)

rock-wallaby, little

Petrogale (all species in genus)

rock-wallaby

Potorous (all species in genus)

potoroo

Setonix (all species in genus)

quokka

Thylogale (all species in genus)

pademelon

Wallabia (all species in genus)

wallaby, swamp

FAMILY Phascolarctidae

Phascolarctos cinereus

bear, koala

ORDER Edentata

FAMILY Bradipodidae

Bradypus (all species in genus)

sloth, three toed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Choloepus</u> (all species in genus)	sloth, two toed
FAMILY Dasypodidae	
<u>Dasypus</u> (all species in genus)	armadillo
FAMILY Myrmecophagidae	
<u>Myrmecophaga tridactyla</u>	anteater, giant
ORDER Hyracoidea	
FAMILY Procaviidae	
<u>Procavia capensis</u>	hyrax, rock
ORDER Insectivora	
FAMILY Erinaceidae	
<u>Hemiechinus auritis</u>	hedge hog, long-eared
FAMILY Soricidae	
<u>Crocidura</u> (all species in genus)	shrew, musk
ORDER Perissodactyla	
FAMILY Equidae	
<u>Equus africanus</u> (=Equus asinus)	ass, African wild
FAMILY Rhinocerotidae	
<u>Ceratotherium simum</u>	rhinoceros, southern white
(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes permitted under section 4-71-6.5)	
<u>Diceros bicornis</u>	rhinoceros, black
(Prohibited for short-term performance or exhibition in circuses, carnivals, or state fairs. Allowed for short-term performance for commercial filming, for exhibition in government zoos, or for other purposes	

SCIENTIFIC NAMECOMMON NAME

permitted under section
4-71-6.5)

Rhinoceros unicornis

(Prohibited for short-term
performance or exhibition in
circuses, carnivals, or
state fairs. Allowed for
short-term performance for
commercial filming, for
exhibition in government
zoos, or for other purposes
permitted under section
4-71-6.5)

rhinoceros, great
Indian

FAMILY Tapiridae

Tapirus indicusTapirus terrestris

tapir, Malayan
tapir

ORDER Proboscidea

FAMILY Elephantidae

Elaphas maximus

(Prohibited for short-term
performance or exhibition in
circuses, carnivals, or
state fairs. Allowed for
short-term performance for
commercial filming, for
exhibition in government
zoos, or for other purposes
permitted under section
4-71-6.5)

elephant, Asian

Loxodonta africana

(Prohibited for short-term
performance or exhibition in
circuses, carnivals, or
state fairs. Allowed for
short-term performance for
commercial filming, for
exhibition in government
zoos, or for other purposes
permitted under section
4-71-6.5)

elephant, African

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Rodentia	
FAMILY Caviidae	
<u>Dolichotis patagonum</u>	cavy, Patagonian
FAMILY Cricetidae	
<u>Cricetulus griseus</u>	mouse, Chinese
<u>Gerbillus gerbillus</u>	gerbil
<u>Meriones unguiculatus</u>	gerbil
<u>Mesocricetus auratus</u>	hamster
<u>Sigmondon hispidus</u>	rat, cotton
FAMILY Dasyproctidae	
<u>Agouti paca</u>	agouti
<u>Dasyprocta agouti</u> (=D. <u>leporina</u>)	agouti
FAMILY Erethizontidae	
<u>Erethizon dorsatum</u>	porcupine, North American
FAMILY Heteromyidae	
<u>Perognathus longimembris</u>	mice, pocket
FAMILY Hystricidae	
<u>Hystrix cristata</u>	porcupine, African crested
FAMILY Myocastoridae	
<u>Myocastor coypu</u> nutria	
FAMILY Sciuridae	
<u>Callosciurus prevosti</u>	squirrel, prevost's
<u>Marmota</u> (all species in genus)	marmots
<u>Sciurus variegatoide</u>	squirrel, variegated
ORDER Scandentia	
FAMILY Tupaiidae	
<u>Tupaia glis</u>	shrew, tree
ORDER Tubulidentata	
FAMILY Orycteropodidae	
<u>Orycteropus afer</u>	aardvark

III. NEW BUSINESS

- B. Discussion and Action on the Proposed Amendments to HAR Title 4 Chapter 72, **Plant and Non-Domestic Animal Quarantine Plant Intrastate Rules**, promulgated by DoAG

**PRE-PUBLIC HEARING SMALL BUSINESS IMPACT STATEMENT
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**
(Hawaii Revised Statutes §201M-2)

Date: 5/9/2023

Department or Agency: Hawaii Department of Agriculture

Administrative Rule Title and Chapter: Title 4 - Department of Agriculture, Chapter 72

Chapter Name: Plant and Non-Domestic Animal Quarantine Plant Intrastate Rules

Contact Person/Title: Jonathan Ho, Acting Manager

E-mail: jonathan.k.ho@hawaii.gov Phone: 808-832-0571

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7?

Yes No

If "Yes," provide details: <https://hdoa.hawaii.gov/blog/main/proposed-administrative-rules/>

I. Rule Description:

New Repeal Amendment Compilation

II. Will the proposed rule(s) affect small business?

Yes No

(If "No," no need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit corporation, limited liability company, partnership, limited partnership, sole proprietorship, or other legal entity that: (1) Is domiciled and authorized to do business in Hawaii; (2) Is independently owned and operated; and (3) Employs fewer than one hundred full-time or part-time employees in Hawaii." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance?

Yes No

(If "Yes" no need to submit this form. E.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives. HRS §201M-2(d))

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a))

Yes No

(If "Yes" no need to submit this form.)

* * *

If the proposed rule affects small business and are not exempt as noted above, please provide a reasonable determination of the following:

1. Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected.

Please see Attachment A.

2. In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance.

Please see Attachment A.

If the proposed rule imposes a new or increased fee or fine:

- a. Amount of the current fee or fine and the last time it was increased.

Please see Attachment A.

- b. Amount of the proposed fee or fine and the percentage increase.

Please see Attachment A.

- c. Reason for the new or increased fee or fine.

Please see Attachment A.

- d. Criteria or methodology used to determine the amount of the fee or fine (i.e., Consumer Price Index, Inflation rate, etc.).

Please see Attachment A.

3. The probable monetary costs and benefits to the agency or other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used.

Please see Attachment A.

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.

Please see Attachment A.

5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.

Please see Attachment A.

6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.

Please see Attachment A.

7. How the agency involved small business in the development of the proposed rules.

Please see Attachment A.

- a. If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.

Please see Attachment A.

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

Please see Attachment A.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.
Please see Attachment A.

- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.
Please see Attachment A.

- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.
Please see Attachment A.

- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.
Please see Attachment A.

- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.
Please see Attachment A.

* * *

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594 / Email: DBEDT.sbrrb.info@hawaii.gov

This Statement may be found on the SBRRB Website at: <http://dbedt.hawaii.gov/sbrrb/resources/small-business-impact-statements>

SBRRB – Pre Public Hearing Statement
May 9, 2023

Listed below is a summary of the specific proposed changes to Chapter 4-72, Hawaii
Administrative Rules.

1. Chapter 4-72 title is amended by adding "and Pest Host Material". Chapter 4-72 is amended by adding headings for "Subchapter 1 General Provisions" and "Subchapter 2 Intrastate Restrictions".
2. Amending Section 4-72-1, Objective by clarifying that Chapter 4-72 is implementing Chapter 141, Hawaii Revised Statutes (HRS) and by deleting "their plant or commodity hosts" and adding "infested or infected pest host material" and references to insects and diseases.
3. Amending Section 4-72-2 Definitions as follows:
 - a. The definition "Board" is corrected.
 - b. The definition "Department" is moved to appear in alphabetical order.
 - c. The definition "Chief" is deleted. All references to "chief" are changed to "SPRO" throughout.
 - d. The definition "Compliance agreement" is added.
 - e. The definition "Infested" is added.
 - f. The definition "Person" is added.
 - g. The definition "Pest" is added.
 - h. The definition "Pest host material" is added.
 - o. The definition "Restricted area" is corrected.
 - j. The definition "Soil" is added.
 - k. The definition "SPRO" is added.
 - l. The definition "State " is added.
4. Amending Section 4-72-3 Inspectional requirements. Adds "soil" to items required to be inspected by HDOA prior to being transported between the islands of the State, unless authorized by section 4-72-4(c). Clarifies that non-propagative plant parts may be inspected, at HDOA's discretion, when being transported between the islands of the State.
5. Amending Section 4-72-4 Prohibited transportations to:
 - a. Clarify that plants, propagative plant parts, and soil not inspected as required by section 4-72-3 may not be transported between islands of the State.
 - b. Add that pest host material that is infested or infected with an insect, disease, or pest, or that is itself a pest may not be transported between or within islands of the State unless it has been treated as approved by the SPRO or the transportation is authorized by the SPRO.
 - c. Add subsection (c) that the inspectional requirements and prohibitions on transportation do not apply to HDOA moving items for diagnostics, research, testing, or educational purposes or to items moved pursuant to a permit approved by the SPRO and issued to an institution approved by the Board, a government agency, or a university for diagnostics, research, testing, or educational purposes.
6. Amending and renumbering Section 4-72-4.5 Designation of infested areas; expansion as section 4-72-10 (see below for proposed changes).

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7. Adds new Section 4-72-5, Restrictions related to pest host material available to the public which authorizes the SPRO to:
 - a. Quarantine or prohibit the movement of items that are for sale or otherwise available to the public, institutions, or government agencies, that are infested or infected with an insect, disease, or pest.
 - b. Require treatment of an area where the infested or infected items are stored.
 - c. Determine the disposition of the infested or infected items.
8. Amending and renumbering Section 4-72-8 Restrictions on transport, harboring, rearing, or breeding of pests as Section 4-72-6. Amendments allow the harboring, rearing, or breeding of a pest in the following instances:
 - a. For diagnostics, research, testing, or educational purposes by HDOA, or for a government agency, or a university at sites approved by the SPRO.
 - b. By an institution approved by the Board, pursuant to a permit approved by the SPRO.
9. Adds new Section 4-72-7, Permit and inspection fees to establish fees as follows:
 - a. The fee for a permit under chapter 4-72 is \$20 per permit for a single shipment within one year and \$100 per permit for unlimited shipments within one year.
 - b. The fee for a site inspection is \$25 per site inspected, plus mileage reimbursement.
10. Adds new Section 4-72-8, Inspection fees to set fees plus mileage reimbursement pursuant to Act 173, SLH 2010 for:
 - a. Inspections and other actions by HDOA carried out beyond regular work hours at \$50.00 per inspection, including applicable charges for overtime, fixed charges, and meals, as appropriate.
 - b. Inspections conducted away from a port or HDOA office at \$50.00 per hour.
11. Adds new Section 4-72-9, Economic loss or damage to clarify that the State is not responsible for economic loss or damages related to actions by HDOA in carrying out Chapter 4-72.
12. Amending and renumbering Section 4-72-4.5 Designation of infested areas; expansion as section 4-72-10 to:
 - a. Make technical amendments regarding press releases and written notices.
 - b. Delete “its plant or commodity hosts” and add “its pest host material”.
 - c. Remove the requirement that the Board’s action to expand an infested area occur on the island where a new infestation has occurred, following written notice to industry groups likely to be affected.
13. Adds new Section 4-72-11, Penalties to clarify that violations of Chapter 4-72 are subject to penalties pursuant to Chapters 150A-14 and 141-7, HRS.
14. Adds new Section 4-72-12, Scientific and common names to clarify that if a scientific or common name set out in Chapter 4-72 is changed to a new scientific or common name the reference in the chapter shall be construed to refer to the new name.
15. Adds new Section 4-72-13, Severability to clarify that if a provision of Chapter 4-72 is found to be unconstitutional or invalid, the other provisions of the chapter are not affected.

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16. Amending and renumbering Section 4-72-5 Examples of regulated pests as Section 4-72-15. Amendments are proposed to make technical changes, including updating scientific and common names, and to add new examples of regulated pests.
17. Amending and renumbering Section 4-72-6 Restrictions on sugarcane as Section 4-72-16. Amendments are proposed to make technical changes and add that a university or government agency may conduct research on sugarcane, pursuant to a permit.
18. Amending and renumbering Section 4-72-7 Restrictions on soil, sand, and animal manure as Section 4-72-17. Amendments are proposed to make technical changes, delete “artificial” and add “soil-less”, and add that an institution approved by the Board, university, or government agency is eligible for a permit for diagnostic purposes.
19. Amending and renumbering Section 4-72-9 Restrictions on dasheen and taro as Section 4-72-18. Deletes “corms” from the heading and throughout the section.
20. Amending and renumbering Section 4-72-10 Restrictions on papaya and cucurbit as Section 4-72-19. Amendments make technical changes to scientific and common names.
21. Amending and renumbering Section 4-72-11 Restrictions on banana as Section 4-72-20. Amendments include adding restrictions for *Fusarium* tropical race 4 and make technical changes for clarity.
22. Amending and renumbering Section 4-72-12 Restrictions on coffee as Section 4-72-21. Amendments make technical changes for clarity and allow coffee plants and plant parts for propagation to be quarantined at a facility approved by the SPRO.
23. Amending and renumbering Section 4-72-13 Quarantine restrictions on ohia and soil from rapid ohia death infested areas as Section 4-72-22. Amendments make technical changes, including updating scientific names.
24. Adds new Section 4-72-23, Quarantine restrictions on CRB and CRB host material to make permanent Plant Quarantine Interim Rule 22-1. The proposed Section:
 - a. Designates the entire island of Oahu as the CRB infested area.
 - b. Prohibits a person from: transporting CRB host material from a CRB infested area to a CRB restricted area, or from transporting, receiving, processing, selling, bartering, donating, otherwise giving away, and exporting CRB host material within or from the CRB infested area except by HDOA; by permit for monitoring, control, eradication or scientific purposes approved by the SPRO; by permit for noncommercial activities subject to an appropriate treatment; pursuant to a compliance agreement issued by the SPRO, or directly exporting the material out of State.
25. Other changes are proposed throughout Chapter 4-72 for clarity, simplification, or to correct format, grammar, punctuation, and typeface.

1. Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected.

The small businesses that will be required to comply with the proposed rules are those that transport regulated commodities intrastate. Some examples would be landscapers or nurseries as they are the most likely to transport live plants or other regulated plant parts. That said, the restrictions/requirements apply to anyone moving the regulated commodities, not just small businesses. The majority of the restrictions/requirements have already been in place for years, i.e. inspection requirements for plants or specific restrictions on coffee, banana, or sugarcane. The newest restrictions/requirements would be for the movement of Coconut Rhinoceros Beetle (CRB) host materials and fees for permit issuance. CRB host materials are only being restricted from Oahu to neighbor islands. Small businesses located in other areas of the state would not be affected by the CRB restrictions.

The affected parties would be affected by this rule by having to factor in additional time for inspections to meet shipping schedules and possibly incur additional fees for permits and/or inspections conducted away from the port of entry, as applicable. Because many of the restrictions/regulations have already been in place, most of those affected are already well aware of the majority of the requirements already and are already in compliance.

2. In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance.

The direct costs will vary based on the types of commodities and number of shipments that occur. For example, if a chemical treatment is required prior to movement, the cost of the treatment and possibly the inspection/certification fees and mileage reimbursement (if conducted away from the office) would need to be assessed. Permit fees of up to \$100/year may be assessed if required for the specific commodity. Generally speaking, indirect costs are not mandated through these rules to gain compliance. Revenue loss may occur if the shipments are unable to comply and cannot be shipped or if inspections fail due to pest infestation, requiring follow-up inspections to correct deficiencies, however, those shipments can still be sold and distributed within the infested areas.

If the proposed rule imposes a new or increased fee or fine:

- a. Amount of the current fee or fine and the last time it was increased.

Inspection fees were imposed via Act 170, SLH 2010, \$50 for each inspection outside normal business hours, or \$50/hour for inspections conducted away

from the port of entry. The proposed rules seek to codify the inspection fee requirements, which have been in place since 2010. There are no existing fees for permit issuance. Permit fees were not in the rules, so fees were not being assessed for permit processing/issuance.

- b. Amount of the proposed fee or fine and the percentage increase.

Permit fees are set at \$20 for a single shipment within a year of permit issuance and \$100 for unlimited shipments within a year of permit issuance.

- c. Reason for the new or increased fee or fine.

To set permitting fees that are in conjunction with other permit fees for plants and non-domestic animals that are imported into the state. The inspection fees, including mileage reimbursement are included for consistency with Act 170, SLH 2010.

- d. Criteria or methodology used to determine the amount of the fee or fine (i.e., Consumer Price Index, Inflation rate, etc.).

The permitting fees are set at the same rates as existing permit fees for plant and non-domestic animal importation pursuant to HRS §150A-7.6. The inspection fees match those set by Act 170, SLH 2010.

3. The probable monetary costs and benefits to the agency or other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used.

The fees are used to defray some of the costs of review, processing, and issuance of permits, including inspection costs if applicable. The probable benefits to HDOA would be to maintain program goals of preventing the spread and establishment of plant pests that are detrimental to agriculture and/or the environment.

There are approximately 25-30 intrastate permits issued per month, with the maximum revenue of \$36,000.00 annually, provided every permit is issued at the \$100.00 rate.

There are approximately 80-100 offsite inspections per month statewide. The average inspection is 1-3 hours. The average inspection cost would be approximately \$125.00, which includes a \$25.00 mileage reimbursement. Annually, the average revenue generated would be about \$150,000.00.

All fees will be distributed into the Pest Inspection, Quarantine, and Eradication fund pursuant to HRS §150A-4.5 and may be used for the operation of biosecurity and

pest inspection, quarantine, eradication, and monitoring programs; the electronic importer manifest program; related facilities; the execution of emergency remedial measures when pests are detected in the course of inspection and quarantine activities by the department; training of inspectors; education of the agricultural industry, permit and certificate holders, and the general public as to import requirements; and for any other purposes deemed necessary to carry out the purposes of Chapter 150A, HRS.

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.

Quarantine measures to prevent the spread of pests are based on scientifically verified measures that can adequately mitigate risk of spread and are designed around the actual industry affected and the specific pest being managed. As a result, mitigation measures will vary greatly based on the specific pest and available techniques that are available to manage said pest. In each instance, the implementation of measures that are effective, verifiable, and most cost efficient are utilized to ensure the transport of regulated commodities with the least impact to those affected, including small businesses.

5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.

There are no less restrictive alternatives. However, the rules are drafted in such a way that there is flexibility to utilize and authorize new quarantine measures as they are scientifically validated.

6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.

The rules allow for the addition of alternative mitigative measures as they are identified and scientifically verified. The PQB tries to work with each specific stakeholder to come up with a verifiable process that can meet the quarantine and inspection requirements based on the businesses' current situation. The use of additional supplies and equipment is normally not considered unless there are no other means of managing a particular risk, such as pesticide treatments that may require specialized equipment, requirements, or licensing to implement.

7. How the agency involved small business in the development of the proposed rules.

The proposed rules were presented to the Advisory Committee on Plants and Animals at its publicly noticed meeting on 2/15/2023 and then to the Board of Agriculture at its publicly noticed meeting on 2/28/2023. Agendas were mailed to those on the Advisory Committee and Board's mailing lists, which included affected stakeholders. The proposed rules are still on the Department's website for review and further discussion at the public hearings, once authorized.

- a. If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.

There were no recommendations during the Advisory review for the proposed rule or the CRB interim rule. PQB believes that none were made because the majority of the proposed amendments did not significantly affect small businesses, or were already in place, such as the inspection fees. Those amendments, such as the restriction of CRB host material, which PQB recognizes will have impacts, impact stakeholders on Oahu who ship CRB host material interisland and PQB has been working with those affected to implement reasonable measures to prevent the spread of CRB. To date, shipments have been able to move and no CRB has been detected on neighbor islands. Additionally, stakeholders understand the importance of preventing the spread of this detrimental pest to the neighbor islands. However, during the public hearing process, the PQB is open to suggestions to the proposed rules, that can be scientifically validated, that can mitigate risk and reduce impact to small businesses.

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

The proposed rules are not more stringent than comparable rules as there are no federal, state, or county standards that address the primary subject of this proposed rule, quarantine restrictions on CRB host material to prevent intrastate movement of CRB to non-infested islands. To date, only HDOA's interim rule 22-1, which expires on July 1, 2023, which the proposed rule replaces, addresses this.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.
- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.
- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.
- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.
- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.

Amendment and Compilation of Chapter 4-72
Hawaii Administrative Rules

Date (month day, year)

1. Chapter 4-72, Hawaii Administrative Rules entitled "Plant and Non-Domestic Animal Quarantine Plant Intrastate Rules, Chapter 72, Hawaii Administrative Rules", is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 4 DEPARTMENT OF AGRICULTURE

SUBTITLE 6 DIVISION OF PLANT INDUSTRY

CHAPTER 72

PLANT AND NON-DOMESTIC ANIMAL QUARANTINE

PLANT AND PEST HOST MATERIAL INTRASTATE RULES

Subchapter 1 General Provisions

- §4-72-1 Objective
- §4-72-2 Definitions
- §4-72-3 Inspectional requirements
- §4-72-4 Prohibited transportations
- ~~§4-72-4.5 Designation of infested areas; expansion]~~
- §4-72-5 Prohibition on movement of infested material
- §4-72-6 Restrictions on transport, harboring, rearing, or breeding of pests
- §4-72-7 User permit and site inspection fees
- §4-72-8 Inspection fees
- §4-72-9 Economic loss or damages

DRAFT

<u>§4-72-10</u>	<u>Designation of infested areas; expansion</u>
<u>§4-72-11</u>	<u>Penalties</u>
<u>§4-72-12</u>	<u>Scientific and common names</u>
<u>§4-72-13</u>	<u>Severability</u>
<u>§4-72-14</u>	<u>(Reserved)</u>

Subchapter 2 Intrastate Restrictions

<u>§4-72-15</u>	Examples of regulated pests
<u>§4-72-16</u>	Restrictions on sugar[-]cane
<u>§4-72-17</u>	Restrictions on soil, sand, and animal manure
[§4-72-8]	Restrictions on transport, harboring, rearing, or breeding of pests]
<u>§4-72-18</u>	Restrictions on dasheen and taro[-corns]
<u>§4-72-19</u>	Restrictions on papaya and cucurbit
<u>§4-72-20</u>	Restrictions on banana
<u>§4-72-21</u>	Restrictions on coffee
<u>§4-72-22</u>	Quarantine restrictions on ohia and soil from rapid ohia death infested areas
<u>§4-72-23</u>	<u>Quarantine restrictions on coconut rhinoceros beetle and host material</u>

Historical note: Chapter 72 of Title 4 is based substantially upon Regulation 4 [E]entitled "Concerning Transportation of Plant or Parts of Same, Plant Materials and Plant Products Between the Hawaiian Islands," of the Division of Entomology, Board of Commissioners of Agriculture and Forestry [Eff 12/12/41 as Reg 14; ren Reg 4 8/30/47; R 7/13/81]; Regulation 4.1 [E]entitled "Concerning Transportation of Plants or Parts of Same, Plant Materials or Plant Products from Oahu to Other Islands of the Hawaiian Group," of the Division of Entomology, Board of Commissioners of Agriculture and Forestry [Eff 12/12/41 as §2 of Reg 14; ren Re 4.1 8/30/47; R 7/13/81]; Regulation 4.2 [E]entitled "Concerning the Transportation of Soil, Earth or Sand from the Islands of Oahu, Hawaii, Lanai and Kauai to Other Islands of the Hawaiian Group," of the Division of Entomology, Board of Commissioners of Agriculture

and Forestry [Eff 12/12/41 as §§4 and 5 of Reg 14; ren Reg 4.2 8/30/47; R 7/13/81]; Regulation 4.3 [E]ntitled "Concerning the Movement of Fern Plants or Parts Thereof Between the Islands of the Hawaiian Group," of the Division of Entomology, Board of Commissioners of Agriculture and Forestry [Eff 12/12/41 as Reg 15; ren Reg 4.3 8/30/47; R 7/13/81]; Regulation 4.4 [E]ntitled "Concerning the Giant African Snail (*Achatina Fulica Bowdich*)," of the Division of Plant Industry, Department of Agriculture [Eff 7/1/42 as Reg 18; ren Reg 4.4 8/30/47; am 5/26/64; R 7/13/81]; and Regulation 4.7 [E]ntitled "Concerning the Transportation of Cactus or Cactaceous Plants or Parts Thereof from the Island of Hawaii to Other Islands of the Hawaiian Group," of the Division of Entomology, Board of Commissioners of Agriculture and Forestry. [Eff 7/13/81; comp 9/19/91; am 4/13/1998; comp 2/24/12]. (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§ 141-2, 150A-8)

SUBCHAPTER 1

GENERAL PROVISIONS

§4-72-1 Objective. The objective of this chapter is to implement the requirements of chapters 141 and 150A, Hawaii Revised Statutes, by restricting or prohibiting the interisland and intransisland transportation of plant pests and ~~[their plant or commodity hosts]~~ infested or infected pest host material to prevent the spread and establishment of plant pests detrimental to agriculture, horticultural industries and forest lands on uninfested islands and in uninfested localities of the State. [Eff 7/13/81; comp 9/19/91; am 4/13/1998; comp 2/24/12; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-2 Definitions. As used in this chapter:

"Advisory Committee" means the advisory committee on plants and animals;

"Animal manure" means manure from poultry or livestock;

"Board" means the board of agriculture;

~~["Department" means department of agriculture;]~~

~~["Chief" means chief of the plant quarantine branch;]~~

"Compliance agreement" means a written agreement between the department and a person who carries out commercial activities that includes any terms or conditions the SPRO determines will slow or prevent the spread of a pest. A compliance agreement between the department and a person is a permit issued by the department to that person for the purposes of section 150A-8, HRS.

"Department" means the department of agriculture;

"Infested" means harboring a pest;

"Infested area" means an island or locality within the State where a specific pest is known to be established; ~~[and]~~

"Person" means any individual, firm, corporation, association, partnership, or other entity, including a governmental or not-for-profit entity;

"Pest" means any animal, insect, disease agent or other organism in any stage of development that is detrimental or potentially harmful to agriculture, or horticulture, or animal or public health, or natural resources including native biota or has an adverse effect on the environment as determined by the board;

"Pest host material" means any plant, propagative plant part, non-propagative plant part, soil, or any other thing that is found to be transporting or harboring an insect, disease, or pest;

"Restricted area" means an island or locality within the State where a specific pest is not known to be established or where an eradication or control project for a specified pest is being conducted by the ~~[plant pest control branch.]~~department;

"Soil" means that part of the upper layer of earth in which plants can grow; this material may or

may not contain organic matter and includes such planting media as deteriorated peat;

"SPRO" means the State Plant Regulatory Official for Hawaii or a designee of the SPRO; and

"State" means the State of Hawaii. [Eff 7/13/81; comp 9/19/91; am and comp 2/24/12; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-3 Inspectional requirements. (a) [~~Plant and~~] Except as provided in section 4-72-4(c), plants, propagative plant parts, and soil shall be inspected prior to being transported between the islands of the State. A certificate of inspection shall indicate satisfaction of the requirement for inspection.

(b) Cut or harvested flowers, foliage, fruits, vegetable, and other non-propagative plant parts need not be inspected prior to being transported between the islands of the State; provided that these commodities [~~shall~~] do not have additional requirements found within this chapter, and may be subject to [~~periodic random~~] inspection at either the port of departure or port of entry[~~-~~], at the discretion of the department. [Eff 7/13/81; comp 9/19/91; am and comp 2/24/12; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-4 Prohibited transportations. (a) [~~The~~] Except as provided in subsection (c), the interisland transportation of [~~a commodity~~] plants, propagative plant parts, or soil that is not inspected pursuant to [~~§4-72-3~~] section 3, is prohibited.

(b) [~~A commodity~~] Pest host material that is infested or infected with a[~~ny~~] insect, disease, or pest, or that is itself a pest[~~defined in §150A-2, Hawaii Revised Statutes,~~] shall not be transported between the islands or from one part or locality of any

island to another part or locality of the same island unless it has been subjected to an appropriate treatment[~~that exterminates the pest~~], as approved by the [chief]SPRO. Appropriate treatment may include, but is not limited to, pesticide or fumigation treatment. The [chief]SPRO may, however, authorize the transportation of an untreated infested [commodity]or infected pest host material to an island or location where the insect, disease, or pest is known to be established.

~~[(c) Specific commodities shall not be transported pursuant to their respective restrictions in §§ 4-72-6, 4-72-7, 4-72-8, 4-72-9, 4-72-10, 4-72-11, and 4-72-12.]~~

(c) Notwithstanding subsections (a) and (b) and section 3, plants, plant parts, soil, or pest host material infested or infected with an insect, disease, or pest may be transported without inspection between islands or between parts or localities of the same island:

- (1) For diagnostics, research, testing, or educational purposes by the department; or
 - (2) Pursuant to a permit approved by the SPRO and issued to an institution approved by the board, a government agency, or a university for diagnostics, research, testing, or educational purposes at a site inspected and approved by the SPRO prior to movement.
- [Eff 7/13/81; am and comp 9/19/91; am and comp 2/24/12; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

~~**[§4-72-4.5 Designation of infested areas; expansion.** (a) The area of infestation as designated by rule, including interim rule, may be expanded by the board to reflect the spread of a specific pest infestation in order to implement quarantine measures to prevent movement of the pest and its plant or commodity hosts from the expanded area of infestation to restricted areas, provided that:~~

- ~~(1) The board first obtains advice from qualified persons with relevant expertise, but need not obtain advisory committee review;~~
- ~~(2) The board designates the expanded infested area, identifying the revised geographical extent of the infestation;~~
- ~~(3) The board's action occurs at a meeting on the island where the new infestation has occurred, following written notice of the proposed board designation to industry groups likely to be affected;~~
- ~~(4) The department issues a press release and written notice of the designation of expansion of the infested area to affected industry groups prior to the effective date of designation of expanded infested area; and~~
- ~~(5) Notice of the board's action, including its effective date, is posted by the following day on the department's website and is given in a daily or weekly publication of statewide circulation or in separate daily or weekly publications whose combined circulation is statewide within twelve days of the board's action.~~

~~(b) The board's designation of an expanded infested area shall be effective the day following the board's action, unless a later effective date is specified by the board's action. [Eff and comp 2/24/12] (Auth: HRS §§141-2, 150A-9, 150A-9.5) (Imp: HRS §§141-2, 150A-8)]~~

§4-72-5 Prohibition on movement of infested material. (a) The SPRO may prohibit the movement of any pest host material that is offered for sale, for barter, or by donation or otherwise to be given away to the public if the SPRO determines that the pest host material is infested or infected with an insect, disease, or pest. The SPRO may compel treatment or destruction of the material per subsection (b). If such material was or is stored in an area that is infested or infected with an insect, disease, or pest,

then the SPRO may require appropriate treatment of the area prior to authorizing the movement of the material.

(b) An item subject to the prohibition in subsection (a) shall be:

- (1) Subjected to a treatment to eradicate the insect, disease, or pest, as approved and supervised by the SPRO;
- (2) Destroyed using a method approved and supervised by the SPRO; or
- (3) If not treated or destroyed under paragraphs (1) or (2), then:
 - (A) Transported only pursuant to a permit issued by the SPRO; or
 - (B) Subject to any other disposition approved by the SPRO, including authorizing the transportation of untreated infested or infected pest host material or an insect, disease, or pest to an island or location where the target insect, disease, or pest is known to be established. [Eff and comp _____] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-6 Restrictions on transport, harboring, rearing, or breeding of pests. (a) The transport, harboring, rearing, or breeding of any pest is prohibited except:

- (1) For diagnostics, research, testing, or educational purposes by the department;
- (2) Pursuant to a permit approved by the SPRO and issued to an institution approved by the board; or
- (3) By a government agency, or a university for diagnostics, research, testing, or educational purposes at a site inspected and approved by the SPRO prior to movement. [Eff 7/13/81; comp 9/19/91; am and comp 2/24/12; am and ren §4-72-6; and comp

] (Auth: HRS §§141-2, 150A-9, 150A-53)
(Imp: HRS §§141-2, 150A-8, 150A-53)

§4-72-7 User permit and site inspection fees.

(a) A fee for the processing of an application and issuance of a permit under this chapter is as follows:

- (1) \$20 per permit for a single shipment within one year from the date of issuance;
- (2) \$100 per permit for unlimited shipments within one year from the date of issuance; and
- (3) All applicable fees shall be paid in full at the time of request and are non-refundable except as approved by the SPRO.

(b) In addition to the requirements of subsection (a), a fee for a site inspection as required by this chapter or by permit conditions shall be \$25 per site inspection, plus mileage reimbursement. [Eff and comp] (Auth: HRS §§141-2, 150A-7.5, 150A-7.6, 150A-9) (Imp: HRS §§141-2, 150A-9)

§4-72-8 Inspection fees. (a) Fees for inspections pursuant to this chapter are as follows:

- (1) A fee of \$50 for any inspection, safeguarding, witnessing treatment, or certification requiring the services of personnel beyond regular work hours, including applicable charges for overtime wages, fixed charges for personnel services, and meals as appropriate;
- (2) A fee of \$50 per hour for any inspection conducted away from the port or department office during regular work hours pursuant to requirements for certification, interisland or intransland movement, or disposition other than release at a port of arrival,

such as witnessing departure, destruction, or treatment.

(b) In addition to any fee required by subsection (a), all inspections shall include mileage reimbursement.

(c) The person receiving the inspection shall be responsible for all costs, charges, treatment, destruction, or expenses incident to the inspection of the material, as appropriate. [Eff and comp] (Auth: HRS §§141-2, 150A-7.5, 150A-9) (Imp: HRS §§141-2, 150A-9)

§4-72-9 Economic loss or damages. The State shall not be responsible for any economic loss or damages related to any actions by the department pursuant to this chapter. Actions include treatment, quarantine, or destruction of any item. [Eff and comp] (Auth: HRS §§141-2, 141-3, 141-5, 150A-9) (Imp: HRS §§141-2, 141-3, 141-5, 150A-8)

§4-72-10 Designation of infested areas; expansion. (a) If the infested area of a pest is designated by rule, including interim rule, that area may be expanded by an order of the board to reflect the spread of a specific pest infestation in order to implement quarantine measures to prevent movement of the pest and its pest host material from the infested area to restricted areas, provided that:

- (1) The board first obtains advice from qualified persons with relevant expertise, but need not obtain advisory committee review;
- (2) The board designates the expanded infested area, identifying the revised geographical extent of the infestation;
- (3) The department issues a press release describing the expansion of the infested area prior to the effective date of

designation of the expanded infested area;
and

- (4) Notice of the board's action, including its effective date, is posted by the following day on the department's website and is given in a daily or weekly publication of statewide circulation or in separate daily or weekly publications whose combined circulation is statewide, within twelve days of the board's action.

(b) The board's designation of an expanded infested area shall be effective the day following the board's action, unless a later effective date is specified by the board's action. [Eff and comp 2/24/12; am and ren §4-72-10; and comp]
(Auth: HRS §§141-2, 150A-9, 150A-9.5) (Imp: HRS §§141-2, 150A-8)

§4-72-11 Penalties. Any person who violates any provision or requirement of this chapter or of any notice given pursuant thereto, shall be subject to the penalties provided for under section 150A-14, HRS, or section 141-7, HRS, if appropriate. [Eff and comp] (Auth: HRS §§141-7, 150A-9, 150A-14) (Imp: HRS §§141-7, 150A-14)

§4-72-12 Scientific and common names. If the scientific name or common name of a taxon referred to in this chapter is changed to a new scientific name or common name accepted by the International Code of Zoological Nomenclature (ICZN) or the International Plant Names Index (IPNI) the reference in this chapter shall be construed to refer to the new scientific name or common name, as appropriate. [Eff and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-9)

§4-72-13 Severability. If any provision of this chapter is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality and validity of the remainder of this chapter and applicability thereof to other persons and circumstances shall not be affected. [Eff and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-9)

§4-72-14 Reserved.

SUBCHAPTER 2

INTRASTATE RESTRICTIONS

§4-72-15 Examples of regulated pests. Examples of [~~pests for the purposes of §4-72-4 shall~~] taxa that are pests include, but are not [~~be~~] limited to the following:

- (1) Oriental beetle - [~~Anomala orientalis~~] Anomala orientalis (Waterhouse), a serious insect pest of sugarcane;
- (2) Fern weevil - [~~Syagrius fulvitarisis~~] Syagrius fulvitarisis Pascoe, an insect pest injurious to fern plants;
- (3) Giant African snail - [~~Achatina fulica~~] Lissachatina fulica (Bowdich), a serious pest of horticultural and vegetable crops;
- (4) Cactus mealybug - [~~Dactylopius opuntiae~~] Dactylopius opuntiae (Cockerell) and other insects feeding on [~~opuntia spp.~~ ~~of~~] Opuntia species of cactus, pests injurious to cactus utilized for forage or ornamental purposes;
- (5) Hunting billbug - [~~Sphenophorus venatus~~]

- ~~vestitus~~] Sphenophorus venatus vestitus
Chittenden, a serious insect pest of turf
and range grasses;
- (6) Coconut scale - [~~Aspidiotus~~
~~destructor~~] Aspidiotus destructor Signoret,
a serious insect pest of palms, bananas,
and more than 400 more plants;
- (7) Sugarcane smut - [~~Ustilago~~
~~scitaminea~~] Ustilago scitaminea Syd., a
serious fungus disease of sugarcane;
- (8) Papaya [~~mosaic~~] ringspot virus, a serious
virus disease of papaya;
- (9) Orange spiny whitefly - [~~Aleurocanthus~~
~~spiniferus~~] Aleurocanthus spiniferus
(Quaintance), a serious insect pest of
rose and citrus;
- (10) Bristly rose slug - [~~Cladius~~
~~diformis~~] Cladius difformis (Panzar), a
pest injurious to the rose plant;
- (11) Croton whitefly - [~~Orchamplatus~~
~~mammaeferus~~] Orchamoplatus mammaeferus
(Quaintance and Baker), a serious insect
pest of croton and citrus;
- (12) Anthurium whitefly -
[~~Aleurotulus~~] Aleurotulus [~~sp.~~] anthuricola
Nakahara, a serious insect pest of
anthurium;
- (13) An anthurium whitefly - [~~Crenidorsum~~
~~sp.~~] Crenidorsum [~~sp.~~] aroidephagus Martin &
Aguiar, a serious insect pest of anthurium,
philodendron, and monstera;
- (14) Eurasian pine aphid - [~~Pineus pini~~] Pineus
pini [Koch] (Macquart), a serious insect
pest of pine;
- (15) Fiery skipper - [~~Hylephila~~
~~phyleus~~] Hylephila phyleus (Drury), a
serious pest of turf and pasture grasses
and ornamental sedges;
- (16) Taro root aphid - [~~Pemphigus~~] Pemphigus
[~~sp.~~] populitransversus Riley, a serious
pest of dryland taro; [and]
- (17) Eucalyptus canker - [~~Cryphonectria~~

- ~~cubensis~~] *Chrysoporthe cubensis* (Bruner) Gryzenh. & M.J. Wingf. [~~Hedges~~], a serious disease of [~~Eucalyptus~~] *Eucalyptus* [~~spp.~~] species;
- (18) Giant salvinia - *Salvinia molesta* Mitchell;
- (19) Water spangles - *Salvinia minima* Baker;
- (20) Water lettuce - *Pistia stratiotes* L.;
- (21) Fusarium wilt of banana - *Fusarium oxysporum* f. sp. *cubense* W.C. Snyder & H.N. Hansen;
- (22) Citrus huanglongbing - *Candidatus Liberibacter asiaticus* Jagoueix, Bové & Garnier, responsible for citrus greening;
- (23) Palm lethal yellows - *Candidatus Phytoplasma palmae* (16SrIV-A subgroup), responsible for lethal diseases of palm;
- (24) Colocasia bobone disease associated virus - *Cytorhabdovirus colocasiae*, a lethal pathogen associated with alomae bobone disease of taro;
- (25) Sweet potato virus disease - Sweet potato chlorotic stunt virus, a lethal disease of sweet potato; and
- (26) Hala scale - *Thysanococcus pandani* Stickney, a serious pest of hala, an environmentally and culturally significant indigenous plant;
- (27) Macadamia felted coccid - *Acanthococcus ironsidei* (Williams, 1973), a detrimental pest to the macadamia nut industry in Hawaii;
- (28) *Acalolepta aesthetica* (Olliff), an invasive longhorn beetle that attacks many plant species;
- (29) Two-lined spittlebug - *Prosapia bicincta* (Say), a serious pest of range grasses;
- (30) Citrus canker - *Xanthomonas citri* subsp. *citri*, a serious disease of citrus;
- (31) Citrus black spot - *Phyllosticta citricarpa* (McAlpine) Aa, a serious disease of citrus; and
- (32) Any taxa designated as a pest for control

or eradication pursuant to chapter 4-69A, including any taxa designated as a noxious weed pursuant to chapter 4-68. [Eff 7/13/81; am and comp 9/19/91; comp 2/24/12; am and ren §4-72-15; and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-16 Restrictions on sugarcane. (a)

Transportation of sugarcane plants and parts thereof including leaves, roots, and cuttings which are hosts of the oriental beetle and sugarcane smut disease shall be prohibited from an infested area to a restricted area for the oriental beetle and sugarcane smut disease except by permit pursuant to subsection (b).

(b) A permit may be issued by the [~~chief~~] SPRO to the [~~Hawaiian Sugar Planters' Association (HSPA)]~~ Hawaii Agricultural Research Center (HARC) and to persons conducting research under the auspices of the [~~HSPA]~~ HARC or a university or government agency for the transportation of a limited quantity of sugarcane plants and parts from an infested area to a restricted area for the oriental beetle or sugarcane smut disease. [Eff 7/13/81; comp 9/19/91; comp 2/24/12; am and ren §4-72-16; and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-17 Restrictions on soil, sand, and animal manure. (a)

Transportation of the following is prohibited from an infested island to a restricted island for the oriental beetle[-]:

- (1) Soil, sand contaminated with visible amounts of soil, and animal manure in bulk shipment or in individual containers except by permit issued pursuant to subsection (b); and

- (2) A plant in soil, sand, or [~~artificial~~]soil-less planting media except[]:
 - (A) A plant from a certified nursery;
 - (B) A plant from a commercial nursery located 1/4 mile or further from a field planted in sugarcane;
 - (C) A plant that has been verified by an inspector as grown in a locality 1/4 mile or further from a field planted in sugarcane;
 - (D) A plant that has been treated with an appropriate soil pesticide;
 - (E) A plant that has been bare-rooted; or
 - (F) [~~Orchid p~~]Plants in cinders, hapuu or other artificial planting media.
- (b) Permits required pursuant to subsection (a)(1) shall be issued by the [~~chief~~]SPRO under [~~either one of~~] the following circumstances:
 - (1) Fresh or composted animal manure that has not supported any plant growth from an area located 1/4 mile or further from any field planted in sugarcane; [~~or~~]
 - (2) Animal manure, soil, and sand contaminated with soil that has been fumigated, [~~or~~] treated with an appropriate pesticide[], or subjected to a treatment, as approved and witnessed by the SPRO; or
 - (3) For diagnostic purpose by an institution approved by the board, a university, or government agency. [Eff 7/13/81; comp 9/19/91; comp 2/24/12; am and ren §4-72-17; and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

~~**§4-72-8 Restrictions on transport, harboring, rearing, or breeding of pests.** (a) The transport, harboring, rearing, or breeding of any pest defined in §150A-2, Hawaii Revised Statutes is prohibited except under safeguards in an area infested by the pest~~

~~involved for research, testing, or educational purposes by:~~

- ~~(1) The plant pest control branch;~~
- ~~(2) An agency, school, or university via permit issued by the chief. [Eff 7/13/81, comp 9/19/91, am and comp 2/24/12] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)]~~

§4-72-[9]18 Restrictions on dasheen and taro [corms]. Transportation of dasheen and taro [corms] are prohibited from an infested island to a restricted island for taro root aphid except:

- (1) Taro [corms] consigned to a poi factory or other food processing plant;
- (2) Dasheen and taro [corms] consigned to produce wholesalers, supermarkets, retail food stores, and restaurants;
- (3) Taro [corms] verified as wetland taro; and
- (4) Taro consigned to individuals for food preparation with the corm's "huli" removed. [Eff 7/13/81; comp 9/19/91; comp 2/24/12; am and ren §4-72-18 and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

4-72-1[0]9 Restrictions on papaya and cucurbit. Transportation of papaya *Carica papaya* and cucurbit (plants in the family [~~eucurbitaceae~~] *Cucurbitaceae*) plants and plant parts except seed and fruit are prohibited from an infested area to a restricted area for papaya [~~mosaic~~] ringspot virus disease. [Eff 7/13/81; comp 9/19/91; comp 2/24/12; am and ren §4-72-19; and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-[11]20 Restrictions on banana. (a) Transportation of banana plants and plant parts except fruits is prohibited from the island of Oahu

and from the North Kona and South Kona Districts on the island of Hawaii, which are banana bunchy top virus infested areas, or from a *Fusarium tropical* race 4 infested area, to other islands and localities within the State except by permit pursuant to subsection (b).

(b) A permit to allow transportation of banana plants and plant parts from an infested area may be issued by the [chief]SPRO subject to permit conditions established by the board to prevent the movement of banana bunchy top virus from banana bunchy top virus infested areas. The [chief]SPRO may, without submitting a permit application to the board, approve the issuance of a permit with conditions previously mandated by the board upon the [chief]SPRO's determination that, for the proposed transport, the previously established conditions are adequate to preserve the quarantine. [Eff 7/13/81; comp 9/19/91; am 4/13/98; am and comp 2/24/12; ren §4-72-20; and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-21[2] Restrictions on coffee. (a)

Transportation of coffee plants and parts thereof, including unroasted seeds (green coffee beans), used coffee bags, and coffee harvesting equipment, including baskets, sacks, or containers, is prohibited from a coffee berry borer infested area to a coffee berry borer restricted area except by permit pursuant to subsection (b).

(b) A permit may be issued by the [chief]SPRO for the transportation of a commodity or item listed in subsection (a), with conditions established by the [chief]SPRO appropriate for each of the following circumstances:

- (1) Coffee plants and plant parts for propagation when subject to treatment with an approved pesticide, and grown and monitored in quarantine for a period of not

- less than one year at a [~~s~~] State facility or other facility approved by the SPRO;
- (2) Coffee plants and plant parts that have been shipped using safeguards approved by the [~~chief~~] SPRO to an approved facility for research purposes;
 - (3) Roasting of green coffee beans that have been subjected to treatments approved by the [~~chief~~] SPRO;
 - (4) Roasting of untreated green coffee beans that have been shipped using safeguards approved by the [~~chief~~] SPRO to an approved facility that is located at least 5 miles away from a commercial coffee growing area;
 - (5) Used coffee bags that have been subjected to treatments approved by the [~~chief~~] SPRO; or
 - (6) Coffee harvesting equipment that has been subjected to treatments approved by the [~~chief~~] SPRO.

(c) The [~~chief~~] SPRO is authorized to approve treatments and mitigative measures as they are scientifically validated and may revise permit conditions accordingly, as necessary to prevent movement of the coffee berry borer from the infested area and to preserve the quarantine. Organic treatment methods are available, as approved by the [~~chief~~] SPRO.

(d) Coffee plants, plant parts, green coffee beans, and used coffee bags for export are not subject to quarantine restrictions, provided that they are exported directly from the coffee berry borer infested area and are not transshipped through a coffee berry borer restricted area in the State. Coffee plants, plant parts, green coffee beans, and used coffee bags for export that move from one infested area to another or that are exported via transshipment through a coffee berry borer restricted area must be double-bagged in thick, transparent, non-permeable plastic bags that are sealed and labeled to identify their contents as being from a specific coffee berry borer infested area, provided that the [~~chief~~] SPRO is authorized to revise these required safeguards, as necessary.

(e) The island of Hawaii is designated as a coffee berry borer infested area, notwithstanding ongoing control projects on the island, and other islands in the State are designated as coffee berry borer restricted areas. The designated coffee berry borer infested area may be expanded by board action as provided in [~~§4-72-4.5.~~] section 10. [Eff and comp 2/24/12; am and ren §4-72-21; and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-[13]22 Quarantine restrictions on ohia and soil from rapid ohia death infested areas.

(a) The board has determined that the disease called ohia wilt (also known as rapid ohia death) presents a serious danger to ohia (*Metrosideros*), the ohia forests of Hawaii, and horticultural and agricultural industries.

(b) Transportation of soil and ohia (*Metrosideros*, all species in genus) plants, plant parts, including flowers, leaves, seeds, stems, twigs, cuttings, mulch, greenwaste, frass, wood, logs, and posts is prohibited from a rapid ohia death infested area to a rapid ohia death restricted area except as allowed by permit pursuant to subsection (c), or as otherwise provided herein.

(c) A permit may be issued by the [~~chief~~]SPRO for the transportation of a material or commodity listed in subsection (b), subject to laboratory analysis or other science-based method approved by the [~~chief~~]SPRO, as appropriate, to determine whether the material or commodity is free of [~~the fungus, *Ceratocystis fimbriata*,~~]the causal agents of ohia wilt disease, *Ceratocystis lukuohia* and *C. huliohia*, and subject to appropriate conditions established by the [~~chief~~]SPRO.

(d) Material or a commodity listed in subsection (b) that tests positive for *Ceratocystis* [~~*fimbriata*~~] *lukuohia* or *C. huliohia*, other than material or a commodity for research or diagnostic purposes, shall not be shipped from a rapid ohia death infested area

to a rapid ohia death restricted area, nor shall any material or commodity in the same lot for shipment be shipped, unless an effective treatment to destroy *Ceratocystis* [~~fimbriata~~]lukuohia and *C. huliohia* is available, is approved by the [~~chief~~]SPRO, and the shipment has been subjected to the approved treatment.

(e) Transportation of a material or commodity listed in subsection (b) for research or diagnostic purposes moving from a rapid ohia death infested area to a rapid ohia death restricted area of the State, shall be under permit, using safeguards approved by the [~~chief~~]SPRO, to [~~an approved~~] a facility[-] inspected and approved by the SPRO prior to transport.

(f) Soil, including soil as a planting medium, may be shipped from a rapid ohia death infested area to a rapid ohia death restricted area of the State subject to pre-shipment testing as provided in subsection (c) and, if applicable, subject to treatment as provided in subsection (d). A shipper of soil that is an active participant in the department's intrastate compliance agreement program in which the shipper is required to maintain *Ceratocystis* [~~fimbriata-free~~]lukuohia and *C. huliohia*-free status as a condition for soil movement from an infested area is subject to testing as required by the compliance agreement and permit.

(g) Finished ohia wood products, such as wood flooring, furniture, bowls, picture frames, carvings, and jewelry that have been subjected to a treatment approved by the [~~chief~~]SPRO do not require a permit for intrastate transportation.

(h) The [~~chief~~]SPRO is authorized to approve treatments and mitigative measures as they are scientifically validated and may revise permit conditions accordingly, as necessary to prevent movement of ohia wilt disease from the infested area and to preserve the quarantine.

(i) The island of Hawaii is designated as a rapid ohia death infested area, notwithstanding any ongoing control projects on the island, and other islands in the State are designated as rapid ohia

death restricted areas. The designated rapid ohia death infested area may be expanded by board action as provided in [~~§4-72-4.5.~~] section 10.

(j) The shipper is responsible for all costs, charges, or expenses incident to the inspection or treatment of the soil and ohia material or commodity listed in subsection (b), including charges for overtime wages, fixed charges for personnel services, and meals. [Eff and comp 11/27/16; am and ren §4-72-22; and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-2, 150A-8)

§4-72-23 Quarantine restrictions on coconut rhinoceros beetle and host material. (a) The board has determined that the coconut rhinoceros beetle, *Oryctes rhinoceros* (CRB), presents a serious danger to the horticultural and agricultural industries and the forests of Hawaii.

(b) As used in this section:

(1) "CRB host material" means the host material of the coconut rhinoceros beetle; and

(A) Includes decaying plant material, mulch, trimmings, fruit and vegetative scraps, wood, stumps, compost, and CRB host palms; and

(B) Does not include:

(i) Plant products intended for consumption, such as coconuts, fruits, nuts, edible leaves, leaves used for cooking, and spices;

(ii) Plant products preserved from decay by treatment or use, such as lumber, woven hats, dried and painted coconuts, wooden posts, wood carvings, and firewood;

(iii) Seeds for planting,

(iv) New and unused commercially bagged plant propagation media or landscaping materials that have

- not been staged or stored in an infested area for more than 30 days;
- (v) Cut flowers and foliage for decoration, such as lei, floral bouquets, or arrangements;
 - (vi) Plant propagation media in live plantings (except when used as propagative material for CRB host palms);
 - (vii) Live propagative plants (except CRB host palms); and
 - (viii) Rock, coral, sand, and gravel.
- (2) "CRB host palms" means all live palm plants in the genera *Cocos*, *Livistona*, *Phoenix*, *Pritchardia*, *Roystonea*, and *Washingtonia* and does not include unsprouted seeds.
- (3) "Transport" means movement of CRB host material out of a single Tax Map Key (TMK) parcel.
- (c) The coconut rhinoceros beetle infested area is designated as the island of Oahu and any other area of the State per section 10.
- (d) Except as provided in subsection (e), no person may transport coconut rhinoceros beetle host material from a coconut rhinoceros beetle infested area to a coconut rhinoceros beetle restricted area within the State or, transport, receive (accept delivery of CRB host material for any purpose), process (meaning the conversion of solid waste into a useful product or preparing for its disposal), sell, barter, donate or otherwise give away, or export CRB host material within a coconut rhinoceros beetle infested area except:
- (1) By the department or an agent of the department for the purposes of monitoring, control, eradication, or scientific or educational purposes;
 - (2) Pursuant to a permit issued by the department for purposes of coconut rhinoceros beetle monitoring, control, eradication, or scientific or educational

- purposes at a site inspected and approved by the SPRO prior to transportation;
- (3) Pursuant to a permit issued by the SPRO for noncommercial activities, subject to an appropriate treatment or mitigation, as required by the SPRO;
 - (4) Pursuant to a compliance agreement issued by the department for commercial activities; or
 - (5) Nursery stock that is directly exported from a coconut rhinoceros beetle infested area to a destination outside of the State.
- (e) The SPRO is authorized to exempt from the requirements of subsection (d) categories of CRB host material, and activities involving CRB host material that pose a low risk of spreading CRB. [Eff and comp _____] (Auth: HRS §§141-2, 150A-9)
(Imp: HRS §§141-2, 150A-8)

2. Material, except source notes, to be repealed is bracketed. New material is underscored.

3. Additions to update source notes to reflect these amendments are not underscored.

4. These amendments to chapter 4-72, Hawaii Administrative Rules, shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on _____, and filed with the Office of the Lieutenant Governor.

DRAFT

Chairperson, Board of
Agriculture

APPROVED AS TO FORM:

Deputy Attorney General

III. NEW BUSINESS

- C. Discussion and Action on the Proposed Amendments to HAR Title 4 Chapter 71A, **Plant and Non-Domestic Animal Quarantine, Microorganism Import Rules**, promulgated by DoAG

**PRE-PUBLIC HEARING SMALL BUSINESS IMPACT STATEMENT
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**
(Hawaii Revised Statutes §201M-2)

Date: 5/9/2023

Department or Agency: Hawaii Department of Agriculture

Administrative Rule Title and Chapter: Title 4 - Department of Agriculture, Chapter 71A

Chapter Name: Plant and Non-Domestic Animal Quarantine, Microorganism Import Rules

Contact Person/Title: Jonathan Ho, Acting Manager

E-mail: jonathan.k.ho@hawaii.gov Phone: 808-832-0571

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7?

Yes No

If "Yes," provide details: <https://hdoa.hawaii.gov/blog/main/proposed-administrative-rules/>

I. Rule Description:

New Repeal Amendment Compilation

II. Will the proposed rule(s) affect small business?

Yes No

(If "No," no need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit corporation, limited liability company, partnership, limited partnership, sole proprietorship, or other legal entity that: (1) Is domiciled and authorized to do business in Hawaii; (2) Is independently owned and operated; and (3) Employs fewer than one hundred full-time or part-time employees in Hawaii." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance?

Yes No

(If "Yes" no need to submit this form. E.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives. HRS §201M-2(d))

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a))

Yes No

(If "Yes" no need to submit this form.)

* * *

If the proposed rule affects small business and are not exempt as noted above, please provide a reasonable determination of the following:

1. Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected.

The change in list placement from the List of Restricted Microorganisms Part to the List of Nonrestricted Microorganisms allows for importation of *Beauveria bassiana* strain ANT-03, which would allow importation as a microbial product/biopesticide. This would allow use and sale in the state giving farmers additional pest control options.

2. In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance.

The cost to register a microbial product is \$150.00 annually. There are no changes to these costs.

If the proposed rule imposes a new or increased fee or fine:

- a. Amount of the current fee or fine and the last time it was increased.

n/a

- b. Amount of the proposed fee or fine and the percentage increase.

n/a

- c. Reason for the new or increased fee or fine.

n/a

- d. Criteria or methodology used to determine the amount of the fee or fine (i.e., Consumer Price Index, Inflation rate, etc.).

n/a

3. The probable monetary costs and benefits to the agency or other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used.

The change in list placement would enable registration, and each product could be registered at \$150.00 per product per year. As this strain is not widespread, the expected revenue is likely less than \$1,000.00 annually.

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.

Registration fees for microbial products are pursuant to Chapter 150A 7.6, HRS.

5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.

Placement on the List of Nonrestricted Microorganisms is the only way to allow importation and subsequent registration as a microbial product.

6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.

Companies that import and sell the microbial product stand to benefit as it is currently not allowed for importation/sale in the state. Farmers/agricultural producers who use the products for pest control will have another treatment option, which may be more cost effective than existing measures, increasing yields and likely sales.

7. How the agency involved small business in the development of the proposed rules.

This request was reviewed by the Advisory Committee on Plants and Animals and the Hawaii Board of Agriculture at their publicly noticed meetings held on December 10, 2021 and January 25, 2022 respectively.

- a. If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.

n/a

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

There are no similar federal, state, or county standards that are similar. The rules are designed to regulate the importation of known cultures of microorganisms to manage risks to agriculture, the environment, and public and animal health and safety.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.
n/a

- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.
n/a

- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.
n/a

- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.
n/a

- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.
n/a

* * *

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594 / Email: DBEDT.sbrrb.info@hawaii.gov

This Statement may be found on the SBRRB Website at: <http://dbedt.hawaii.gov/sbrrb/resources/small-business-impact-statements>

LIST OF RESTRICTED MICROORGANISMS PART A

Date (month day, year)

SCIENTIFIC NAME

FUNGI

Aethalia - all species in genus
Albugo - all species in genus
Alternaria - all species in genus except:
 A. alternata
 A. geophila
Allomyces - all species in genus
Amanita muscaria
Amanita rubescens
Angiosporus solani
Aphanomyces - all species in genus
Armillaria - all species in genus
Ascobolus stercorarius
Ascochyta - all species in genus
Aspergillus - all species in genus except:
 A. candidus *A. clavatus*
 A. cremeus *A. flavipipes*
 A. flavus *A. fumigatus*
 A. glaucus *A. nidulans*
 A. niger *A. ochraceus*
 A. restrictus *A. terreus*
 A. ustus *A. versicolor*
 A. wentii
Asperisporium - all species in genus

Beauveria - all species in genus except:
 B. bassiana ANT-03
Bipolaris - all species in genus except:
 B. hawaiiensis
Botryodiplodia - all species in genus
Botryosphaeria - all species in genus
Botrytis - all species in genus
Bremia - all species in genus

Calonectria - all species in genus
Ceratocystis - all species in genus
Cercospora - all species in genus
Cercospora - all species in genus
Choanephora - all species in genus
Cionothrix - all species in genus

LIST OF NONRESTRICTED MICROORGANISMS

Date (month day, year)

SCIENTIFIC NAME

FUNGI

Absidia coerulea
Absidia corymbifera
Absidia ramosa
Absidia spinosa
Acremonium falciforme
Acremonium kiliense
Acremonium recifei
Acremonium vitis
Agaricus bitorquis
Agaricus bisporus
Agaricus campestris
Agaricus sp. (Portabello mushroom)
Alternaria alternata
Alternaria geophila
Apiotrichum humicola
Arthrotrichum - all species in genus
Aspergillus candidus
Aspergillus clavatus
Aspergillus cremeus
Aspergillus flavipipes
Aspergillus flavus
Aspergillus fumigatus
Aspergillus glaucus
Aspergillus nidulans
Aspergillus niger
Aspergillus ochraceus
Aspergillus restrictus
Aspergillus terreus
Aspergillus ustus
Aspergillus versicolor
Aspergillus wentii
Asteromyces cruciatus
Aureobasidium pullulans
Auricularia polytricha

Beauveria bassiana ANT-03
Bipolaris hawaiiensis
Blastomyces dermatitidis
Blastoschizomyces capitatus
Boletus californicus
Boletus granulatus
Boletus luteus

Amendment and Compilation of Chapter 4-71A
Hawaii Administrative Rules

Date (month day, year)

1. Chapter 4-71A, Hawaii Administrative Rules entitled "Plant and Non-Domestic Animal Quarantine Microorganism Import Rules, Chapter 71A Hawaii Administrative Rules", is amended and compiled to read as follows:

HAWAII ADMINISTRATIVE RULES TITLE 4

DEPARTMENT OF AGRICULTURE SUBTITLE 6

DIVISION OF PLANT INDUSTRY CHAPTER

71A

PLANT AND NON-DOMESTIC ANIMAL QUARANTINE

MICROORGANISM IMPORT RULES

Subchapter 1 General Provisions

§4-71A-1	Objective
§4-71A-2	Definitions
§4-71A-3	Importation of microorganisms, generally
§4-71A-4	Request for importation
§4-71A-5	Application review
§4-71A-6	Permits requiring board action
§4-71A-7	Processing permit applications requiring board action
§4-71A-8	Pre-entry requirements
§4-71A-9	Inspection upon entry
§4-71A-10	Site inspection
§4-71A-11	Permits
§4-71A-12	Emergency permits
§4-71A-13	Permit amendment
§4-71A-14	Permit cancellation
§4-71A-15	Permit renewal

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§4-71A-16	Post-entry inspections
§4-71A-17	List amendment by order
§4-71A-18	Maximum time period for permit approvals, disapprovals, extensions, or automatic approvals
§4-71A-19	User fees
§4-71A-20	Violations

Subchapter 2 Introduction of
Microorganisms

§4-71A-21	List of restricted microorganisms, Part A
§4-71A-22	List of restricted microorganisms, Part B
§4-71A-23	List of select human pathogens
§4-71A-24	List of nonrestricted microorganisms
§4-71A-25	Unlisted microorganisms

Subchapter 3 Permit conditions

§4-71A-26	Permit conditions
§4-71A-27	Standard permit conditions
§4-71A-28	Supplemental permit conditions

Subchapter 4 Introduction of
Microbial Products

§4-71A-29	Introduction of a microbial product
§4-71A-30	Microbial product registration
§4-71A-31	Conditions of registration
§4-71A-32	Registration renewal
§4-71A-33	Cancellation of registration
§4-71A-34	Import of a microbial product under trade secret claim

Historical note: Chapter 4-71A is based substantially upon chapter 4-71, HAR, entitled "Nondomestic Animal and Microorganism Import Rules". [Eff. 7/13/81; am and comp 9/19/91; comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99]

SUBCHAPTER 1

GENERAL PROVISIONS

§4-71A-1 Objective. The board, while mindful of the benefit to the State of allowing import of microorganisms for purposes such as scientific and medical research, biotechnology and commerce, recognizes the concomitant necessity for regulating importation of microorganisms in order to protect important State interests. The objective of this chapter is to implement the requirements of chapter 150A, HRS, with respect to microorganisms by regulating the importation of specific microorganisms that are detrimental or potentially harmful to agriculture, horticulture, animal or public health, or natural resources, including native biota, or have an adverse effect on the environment as determined by the board of agriculture. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-2 Definitions. As used in the chapter:

"Advisory subcommittee" means one of the advisory subcommittees on entomology, invertebrate and aquatic biota, land vertebrates, plants, algae, bacteria, fungi, protozoa, or viruses appointed by the chairperson pursuant to section 150A-10, HRS;

"Applicant" means a person who has submitted an application for import or possession of a microorganism or both through permit or other official document authorizing import under this chapter and has paid the applicable fee;

"Board" means the board of agriculture of the department of agriculture;

"Branch" means the plant quarantine branch;

"Chief" means the chief or manager of the plant quarantine branch or a department employee designated by the chief or chairperson;

"Completed permit application" means a permit application submitted by an applicant on the form

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provided by the department and which contains the required information adequate, in the chief's judgment, for review by the department, and if appropriate, by the advisory subcommittee(s), advisory committee, and board of agriculture;

"Department" means the department of agriculture;

"High risk microorganism" means a microorganism the import of which has been determined to be highly likely to cause significant harm to agriculture, horticulture, the environment, or animal or public health, in the absence of appropriate restrictions or safeguards;

"Importer" means a person who receives for transport or brings or causes to be brought to the State in any manner, any microorganism for the purpose of debarkation or entry;

"Label" means the written, printed, or graphic matter on or attached to the outside of the container of microorganisms with the required markings to cause inspection of the microorganism contained in the shipment;

"Letter of authorization" means an official document in lieu of an import permit or microbial product registration issued by the branch authorizing a specific unlisted microorganism species determined to be a low risk microorganism to enter the State;

"Low risk microorganism" means a microorganism species that is most likely already present in Hawaii, the import of which is not likely to cause additional harm to agriculture, horticulture, the environment, or animal or public health in the absence of restrictions or safeguards, or for which department-imposed restrictions other than the notification, labeling, and inspection requirements of this chapter are not likely to reduce any risks that may be associated with import of the microorganism;

"Microbial product" means a manufactured product containing known cultures of microorganisms for the purpose of bioremediation or bioaugmentation, including a product such as a microbial pesticide;

"Microorganism" means any unicellular microscopic organism including but not limited to algae, bacteria,

fungi, protozoa, and viruses;

"Moderate risk microorganism" means a microorganism the import of which has been determined to potentially cause harm to agriculture, horticulture, the environment, or animal or public health, in the absence of appropriate restrictions or safeguards;

"Nonrestricted microorganisms" means any microorganism on the list of nonrestricted microorganisms required to be maintained pursuant to section 150A-6.3 HRS;

"Permit" means a written document issued by the branch to allow the introduction and possession of a microorganism subject to permit conditions established by rule or the board;

"Permittee" means any person that has applied for and been granted a permit for the introduction and possession of a microorganism under this chapter;

"Person" means any individual, agency, firm, corporation, association, institution, or partnership or any organized group of persons whether incorporated or not;

"Recombinant DNA" means molecules that are constructed outside living cells by joining natural or synthetic deoxyribonucleic acid (DNA) segments to DNA molecules that can replicate in a living cell, or molecules that result from the replication of those described herein;

"Restricted microorganism" means any microorganism on the list of restricted microorganisms required to be maintained pursuant to section 150A-6.3 HRS;

"Registration" means the process required for import of microbial products containing certain strains of nonrestricted microorganisms;

"Select human pathogens" means species of microorganisms that present high risk to public health and which have oversight by the Centers for Disease Control and Prevention under 42 United States Code of Federal Regulations, section 72.6;

"Site inspection" means department inspection of the facility, equipment, records pertaining to the

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microorganisms imported under permit, as well as procedures to contain the microorganism;

“Unlisted microorganism” means any microorganism not on the lists of nonrestricted or restricted microorganisms or on the list of select human pathogen microorganisms required to be maintained pursuant to section 150A-6.3, HRS. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-3 Importation of microorganisms, generally. (a) The introduction into Hawaii of any microorganism shall require, at a minimum, a request for import, approval for the import in advance of shipment, and compliance with the notification, labeling, and inspection requirements of sections 4-71A-4, 4-71A-8, and 4-71A-9. Failure to comply with these requirements is sufficient cause for refusal to allow entry of the microorganism into the State.

(b) In addition to the requirements of subsection (a), import into Hawaii and possession of a microorganism is allowed only as provided below for each respective category and requires:

- (1) A written request for import pursuant to section 4-71A-4 and as provided in section 4-71A-24, for a microorganism species on the list of nonrestricted microorganisms;
- (2) A permit, for a microorganism species on the list of restricted microorganisms, Part A or Part B, as provided in sections 4-71A-4, 4-71A-7 and, as applicable, sections 4-71A-21 and 4-71A-22;
- (3) A special permit or letter of authorization, according to risk level, for an unlisted microorganism species, as provided in section 4-71A-4 and 4-71A-25;
- (4) An emergency permit, for an unlisted microorganism species or a microorganism species on the list of restricted microorganisms in an emergency or disaster situation, as provided in section 4-71A-12; and

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- (5) Notification to the department of health of entry for possible department of health inspection and monitoring, for a microorganism species on the list of select human pathogens, as provided in section 4-71A-23.

(c) Importation of microbial products shall be subject to the requirements of subsection (a) and subchapter 4. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-4 Request for importation. (a) Except as otherwise provided for microbial products, a request to import a microorganism species, regardless of whether listed for import or unlisted, shall be submitted to the chief with the following information:

- (1) Importer's reason for importing the specific microorganism into the State;
 - (2) A request that the department inspect the microorganism upon arrival in the State;
 - (3) An agreement to be responsible for all costs, charges, or expenses incident to the inspection or treatment of the imported microorganisms;
 - (4) A waiver of all claims for damages incident to the inspection or the fumigation, disinfection, quarantine, or destruction of the microorganism, if any treatment is deemed necessary;
 - (5) Name, complete address, telephone, and facsimile numbers of the shipper and importer;
 - (6) Quantity, common and scientific names (genus and species names unless not yet classified) of each microorganism;
 - (7) Description of each species of microorganism including whether or not the microorganism is a recombinant DNA strain;
 - (8) Mode of transportation; and
 - (9) Approximate date of arrival.
- (b) A request to import into Hawaii and possess

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a microorganism species on the restricted list, Part B, for the purposes described in section 4-71A-22(c)(1), (2) and (3), shall include, in addition to the information required in subsection (a), the following:

- (1) Description of the proposed use of the microorganism, including whether or not inoculation studies will be done;
- (2) Description and location of the facility, and description of the equipment and procedures that will be used to contain the microorganism, including a floor plan or blueprint of the facility or both that addresses:
 - (A) Design and construction;
 - (B) Work and storage areas;
 - (C) Equipment such as biosafety cabinets, autoclaves, freezers, incubators, holding tanks, generators;
 - (D) Plumbing system such as sinks, drains, effluent treatment and discharge systems;
 - (E) Air-handling system such as air conditioning, supply and exhaust air system, and types and placement of filters; and
 - (F) Biosafety procedures.
- (3) Explanation of the method for destroying and disposing of the microorganism;
- (4) Statement as to whether or not the use of the microorganism is subject to federal, county or state requirements other than the department's;
- (5) The material safety data sheet, product label, and product information sheet;
- (6) Importer's qualification and previous experience working with the requested microorganism, including documentation to confirm relevant education, employment, and previous experience; and
- (7) Any other pertinent documented information required by the chief.

(c) A request to import an unlisted microorganism or a microorganism that requires board action shall include the information required in subsections (a) and (b), as well as the following additional information:

- (1) Description of the microorganism including information on its taxonomic classification, natural habitat, geographic range or niche requirements, temperature requirements, host range, and dispersal capabilities; and
- (2) Analysis of the microorganism's potential impact on Hawaii's environment, agricultural, horticultural and aquacultural industries, and animal and human health, in the event the microorganism escapes or is released into the environment.

(d) Failure to provide the information requested and to complete the application as required in this section shall be sufficient cause for denial of the request for import. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-5 Application review. (a) Upon receipt of a completed application for import of a nonrestricted microorganism species from cultured stock or a select human pathogen microorganism species, the branch shall verify the list placement of the requested microorganism and, if appropriate under section 4-71A-24 and 4-71-23, respectively, shall give permission to import without permit, fee, or board review, subject to satisfaction of pre-entry and inspection requirements.

(b) The chief, without submitting a permit application to the board, may approve or disapprove the issuance of a permit for import of a microorganism other than one listed in section 4-71A-6(1)-(5), based on a past board decision relating to the same species and strain of microorganism if the current application presents substantially the same circumstances of importation, provided that the respective permit conditions previously established by the board shall

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apply if the permit is approved.

(c) A permit application for import of a microorganism species that was previously disapproved by the board may be resubmitted for board action as provided in section 4-71A-7 upon determination by the chief that conditions for importation are substantially different from the previously disapproved request. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-6 Permit applications requiring board action. Board action, as well as prior review by the advisory subcommittee(s) and the advisory committee on plants and animals pursuant to section 4-71A-7, are required for requests to import the following:

- (1) A microorganism species on the list of restricted microorganisms (Part A);
- (2) A microorganism species on the list of restricted microorganisms (Part B) or an unlisted microorganism if either are to be imported for purposes other than those described in subsections 4-71A-22(c)(1), (2), or (3);
- (3) A strain of a microorganism on the list of restricted microorganisms (Part B) that is likely to increase the risk level above that of a moderate risk microorganism;
- (4) An unlisted microorganism species determined by the department to be a high risk microorganism; and
- (5) Any microorganism species not from cultured stock. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-7 Processing permit applications requiring board action. (a) The applicant shall provide the chief with seven copies of the application together with information required by section 4-71A-4.

(b) The chief shall compile the information submitted by the applicant and send it to the members

of the appropriate advisory subcommittee(s) for review.

(c) The comments and recommendations of the advisory subcommittee(s) shall be compiled and sent to the advisory committee on plants and animals for review.

(d) The comments and recommendations of the advisory subcommittee(s), the advisory committee on plants and animals, including the committee's votes, and of the chief shall be compiled and submitted to the board at its regular scheduled meeting.

(e) The board shall take action to approve or disapprove the permit application.

(f) The board may impose permit conditions including but not limited to, time, place, location, use, special precautions, health requirements, and requirements for safeguarding the microorganism from escape, unauthorized release, or theft, as well as any applicable requirements of municipal, state, or federal law. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-8 Pre-entry requirements. (a) The importer is responsible for assuring that all parcels or containers of microorganisms for import are marked as follows:

- (1) Any microorganism imported into Hawaii by mail or air express as individual parcels shall be plainly and legibly marked on the outer packaging, "Live Organism" and "This Parcel May be Opened and Delayed for Agriculture Inspection. Infectious microorganisms affecting humans and animals shall be packaged and labeled or marked in accordance with the transport requirements of the U.S. Department of Transportation 49 CFR Parts 171-180 and the U.S. Department of Health and Human Services 42 CFR part 72; or
- (2) Any microorganism imported into Hawaii by means other than in subsection (a)(1), shall be accompanied by a bill of lading, waybill

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or other shipping document that is plainly and legibly marked "Agriculture Inspection Required".

(b) Any microorganism imported into Hawaii by mail or any other means, shall be accompanied by an invoice, packing list or other document indicating the quantity and scientific name of each microorganism or the name of each microbial product contained in the shipment. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-9 Inspection upon entry. (a) All microorganisms shall enter the State through the port of Honolulu except that the chief may, in the chief's discretion, allow import of a microorganism through another port in order to avoid unnecessary delay and expense when the shipment has been misrouted there through no fault of the importer, provided that the department's pre-entry inspection can be adequately carried out at the alternate port.

(b) The importer or transportation company, as applicable, shall notify the chief, in writing, immediately upon arrival of the microorganism, of the arrival, giving the following information:

- (1) Waybill number;
- (2) Container number;
- (3) Name and address of the consignor;
- (4) Name and address of the consignee or the consignee's agent in the State;
- (5) Number of packages;
- (6) Description of contents of each package;
- (7) Port of entry; and
- (8) Other pertinent information determined necessary by the chief.

(c) The microorganism shall be held at the approved port of entry for inspection by the department.

(d) Upon inspection, the microorganism may be refused entry, seized, held in quarantine, disinfected, treated chemically or manually, or destroyed at the expense of the importer, as

appropriate in the department's discretion, for any of the following:

- (1) No valid permit;
- (2) No invoice or other documentation required to enter the State;
- (3) Damaged or leaking parcel; or
- (4) Shipment infested with a pest.
- (e) The importer is responsible for all costs, charges, expenses, damages, or losses incident to the inspection, treatment, disinfection, quarantine, destruction, of a microorganism, if treatment is deemed necessary. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-10 Site Inspection. (a) Site inspection and approval by the department are required before a permit is issued.

(b) The site shall be in compliance with the following:

- (1) Use, facility, equipment, procedures, and safeguards proposed and described in the import request, as approved by the board or chief; and
- (2) Permit conditions. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-11 Permits. (a) A permit for import and possession of a microorganism shall be obtained in advance of importation and shall be:

- (1) Valid for the period designated on the face of the permit; and
- (2) Nontransferable, unless otherwise specified in the permit.

(b) Where a permit for an import of a microorganism species on the restricted list, (Part B) or an unlisted moderate risk level microorganism allows for transfer or sale of the microorganism, a proposed transferee must first:

- (1) Obtain a permit for possession by

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application to the chief pursuant to sections 4-71A-4 and, if applicable, 4-71A-7;

- (2) Obtain site inspection approval; and
- (3) Demonstrate ability to comply with established permit conditions, except that the board, without requiring a permit, may allow the transfer or sale of a microorganism described in subsection (b), if the microorganism is sold as food or beverage.

(c) The provisions of this section as well as sections 4-71A-13, -14, -15, -16, -18, -19 and -20 are applicable to special permits for import and possession of unlisted microorganisms.

(d) Permits are subject to conditions as provided in subchapter 3 and, where applicable, as established by the board. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-12 Emergency permit. (a) The department may issue an emergency permit on a case-by-case basis to a state or federal agency or state university to allow import and possession of a microorganisms on the list of restricted microorganisms or an unlisted microorganism for the purpose of remediating any emergency or disaster affecting agriculture, horticulture, the environment, or animal or public health; provided that:

- (1) The board, without advisory committee review, first obtains advice from qualified persons with relevant expertise;
- (2) The board determines that import in less time than is required for issuance of a permit or special permit by the board pursuant to sections 4-71A-21, 4-71-22 and 4-71A-25, as applicable, is necessary to remediate the emergency or disaster; and
- (3) The board determines that the importer is able to meet conditions established by the board.

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(b) Application for emergency permit shall be made as provided in section 4-71A-4 and shall explain the emergency circumstances warranting expedited board action. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-13 Permit amendment. (a) An importer who requests a change to a permit including permit conditions shall submit to the chief the following:

- (1) A statement requesting amendment of the permit or permit conditions;
- (2) A photocopy of the valid permit with the desired exact changes clearly indicated on the photocopy;
- (3) An explanation of the requested change or changes;
- (4) Supporting documentation; and
- (5) Any other documented information determined by the chief to be necessary.

(b) The chief may approve a minor amendment to a permit but shall refer to the board a change requiring board action, such as a request to:

- (1) Add a microorganism not approved for import by the board; or
- (2) Amend permit conditions established by the board.

(c) The chief may require an additional site inspection approval for a request to add another site to the permit or to change the responsible person named in the permit.

(d) Amendment of a permit is subject to a user fee pursuant to section 4-71A-19. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-14 Permit cancellation. The chief may cancel a permit for any of the following reasons:

- (1) Noncompliance with a permit condition;
- (2) A change in statute or administrative rule restricting or disallowing import of the

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- microorganism or board action disallowing a previously allowed use of the microorganism;
- (3) A citation issued to the permittee for a violation involving import or possession of a microorganism or both; or
 - (4) Upon written request by the permittee.
[Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-15 Permit renewal. (a) A request to renew a permit shall be made within two months prior to the date of permit expiration.

(b) The importer shall submit a request to renew a permit on the renewal form provided by the department and shall include the following information:

- (1) A statement requesting renewal of the permit, listing the permit and date of expiration;
- (2) A statement verifying that the request for permit renewal is for further import of the same species of microorganisms for the same purpose and using the same facility, equipment, procedures, and safeguards previously submitted by the importer and as approved by the chief or board; and
- (3) An agreement by the importer to comply with permit conditions.

(c) The chief may require a site inspection and approval for a permit renewal that adds another site to the permit or that changes the responsible person named in the permit.

(d) The chief may disapprove a permit renewal request based on the following:

- (1) Proposed changes are made to the species of microorganisms listed on the permit;
- (2) Proposed changes are made to the use, facility, equipment, procedure, or safeguards previously submitted by the importer and as approved by the chief or board;

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- (3) The importer has not, as of the date of the chief's action on the permit renewal request, deposited or paid bail with respect to any outstanding summons or citation issued to the importer; or
- (4) The importer has not paid the user fee pursuant to section 4-71A-19.
- (e) If the request for permit renewal is not applied for within 30 days after the expiration of the permit, the request for renewal shall be treated as a new import request and shall be subject to the import requirements of section 4-71A-3; and if applicable, 4-71A-7. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-16 Post-entry inspection. (a) Microorganisms imported under permit shall be subject to periodic inspection by the branch.

(b) At a post-entry inspection, the permittee shall make available for inspection the microorganism, records pertaining to the microorganism imported under permit, equipment, and facility upon request by the chief.

(c) Post-entry inspections are subject to user fees pursuant to section 4-71A-19. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-17 List amendment by order. (a) By order, the board may adopt additions to or deletions from the lists of microorganisms without regard to the notice and public hearing requirements of chapter 91, HRS; provided that thirty days or more prior to the effective date of the order, the department shall issue a press release and mail notices to the Office of Environmental Quality Control for publication and to all persons who have made a timely written request of the department for advance notice of the order or the department's rulemaking proceedings. The press release and the notice shall include:

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- (1) A statement summarizing the substance of the proposed order which may include examples of the kinds of microorganisms being added to or deleted from the lists required under section 150A-6.3, HRS;
- (2) A statement that a copy of the proposed order and the proposed exact changes will be mailed to any interested person who requests a copy upon payment in advance of costs for photocopying, preparing, and mailing the copy;
- (3) A statement as to where to obtain a copy of the proposed order and the proposed exact changes for inspection, or for pick-up after payment in full of costs for photocopying and preparing; and
- (4) A statement that the department is soliciting comments regarding the proposed order during the next thirty days, where comments may be forwarded to, and where the proposed order will be discussed.

(b) The department shall consider all oral and written comments and may incorporate the same in its review of the proposed order by the advisory committee on plants and animals in a noticed, public meeting.

(c) Upon approval by the board at a noticed, public meeting, the order to adopt additions to or deletions from the lists of microorganisms shall take effect ten days after the daily or weekly publication of statewide circulation or in separate daily or weekly publications whose combined circulation is statewide. [Eff. 11/30/01] (Auth: HRS §§150A-5.9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-18 Maximum time period for permit approvals, disapprovals, extensions, or automatic approvals. (a) Pursuant to the requirements of chapter 91, HRS, the department shall establish the following maximum time periods for the processing of permit requests after acceptance of a completed permit application and payment of applicable fees pursuant to

sections 4-71-4 and 4-71-19:

- (1) For microorganism species for which the chief is authorized to approve a permit, i.e., restricted list (Part B) microorganisms for purposes provided in Section 4-71A-22(c)(1), (2), and (3), the chief may approve or disapprove the issuance of a permit within 90 days; and
- (2) For microorganisms requiring board action as provided in section 4-71A-6, the board may approve or disapprove the issuance of a permit within 180 days.

(b) Notwithstanding the requirements of subsection (a), the maximum period of time shall be extended indefinitely in the event of a national disaster, state emergency, or union strike, which prevents the department from fulfilling application or review requirements in a timely manner.

(c) Except as provided for in subsection (b), an application request for the issuance of a permit shall be given automatic approval if action is not taken by the department within the established maximum period of time as specified in subsection (a). After the expiration of the maximum time period is brought to the attention of the department, the department shall have a reasonable amount of time to issue the permit.

(d) This section shall apply only to application requests for business or development-related permits required by law to be obtained prior to the formation, operation, or expansion of a commercial or industrial enterprise.
[Eff. 11/30/01] (Auth: HRS §§ 91-13.5, 150A-9)
(Imp: HRS §150A-6.3)

§4-71A-19 User fees. (a) The fee to process permits or permit renewals for import of an unlisted microorganism or a microorganism on the list of restricted microorganisms shall be as follows:

- (1) Five dollars per permit for a single

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- shipment within one year from date of issuance or within a calendar year; or
- (2) Fifty dollars per permit for unlimited shipments within one year from date of issuance or within a calendar year.
- (b) The fee to amend a permit shall be five dollars per request.
- (c) The fee to process the registration of a microbial product shall be fifty dollars for unlimited shipments within two years from the date of issuance.
- (d) The fee to renew registration of a microbial product shall be twenty-five dollars for unlimited shipments within one year from the date of renewal.
- (e) In addition to the requirements of subsection (a), a fee for a site inspection as required in this chapter or by permit conditions shall be twenty-five dollars per inspection plus mileage reimbursement.
- (f) For inspection requiring the services of personnel beyond official working hours, an additional fee shall be assessed which shall include applicable charges for overtime wages, fixed charges for personnel services, and meals if required.
- (g) Permit and inspection fees may be waived by the chief for not-for-profit organizations, universities, schools, or government agencies.
- (h) All fees shall be paid in full at the time of submission of the request and shall be submitted to the chief as follows:
- (1) Cash for walk-in payments only; or
- (2) Money orders, cashier's or company check made payable to the "Hawaii Department of Agriculture".
- (i) All fees paid are non-refundable. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-20 Violations. Any person who violates any provision or requirement of this chapter or of any notice given pursuant thereto, shall be subject to the penalties provided for under section 150A-14, HRS.

[Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

SUBCHAPTER 2

INTRODUCTION OF MICROORGANISMS

§4-71A-21 List of restricted microorganisms, Part A. (a) The list of restricted microorganisms, Part A, is comprised of microorganisms classified as high risk microorganisms.

(b) The list of microorganisms designated as restricted, Part A, dated October 25, 2001, is located at the end of this chapter and made a part of this section.

(c) The introduction into Hawaii and possession of a microorganism on the list of restricted microorganisms, Part A, shall be by permit approved by the board pursuant to sections 4-71A-4 and 4-71A-7 and subject to permit conditions established by the board as further provided in section 4-71A-26. [Eff. 11/30/01] (Auth: HRS §§150A-5.9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-22 List of restricted microorganisms Part B. (a) The list of restricted microorganisms, Part B, is comprised of microorganisms classified as moderate risk microorganisms.

(b) The list of microorganisms designated as restricted, Part B, dated October 25, 2001, is located at the end of this chapter and made a part of this section.

(c) The introduction into Hawaii and possession of a microorganism on the list of restricted microorganisms, Part B, may be allowed by permit approved by the chief for the following purposes:

- (1) Laboratory studies, analyses, or diagnostics excluding manufacturing or production;
- (2) Plant or soil inoculation studies in a laboratory or growth chamber; or

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(3) Cultivation of algal, cyanobacterial and photosynthetic bacterial species in a closed or semi-closed system such as a photobioreactor.

(d) The introduction into Hawaii and possession of a microorganism on the list of restricted microorganisms, Part B, for purposes other than those described in subsection (c) will require a permit approved by the board pursuant to sections 4-71A-4 and 4-71A-7.

(e) If the chief determines that import of a strain of microorganism on the list of restricted microorganisms, Part B, is likely to increase the level of risk above that of a moderate risk microorganism as defined in section 4-71A-2, the request to import will require a permit approved by the board pursuant to sections 4-71A-4 and 4-71A-7.

(f) A permit issued under this section is subject to permit conditions as provided in subchapter 3. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-23 List of select human pathogens. (a) The list of microorganisms designated as select human pathogens, dated October 25, 2001, is located at the end of this chapter and made a part of this section.

(b) The introduction into Hawaii and possession of a microorganism on the list of select human pathogens is allowed without permit issued by the department subject to branch approval for the import in advance of shipment, and satisfaction of pre-entry and inspection requirements and further provided that:

- (1) The importer submits to the chief in advance of shipment a valid certificate issued by the CDC, for the movement of a species cited in Appendix A of the CDC List of Select Agents at 42 United States Code of Federal Regulations, section 72.6; or
- (2) The importer is a clinical laboratory certified under the Clinical Laboratory Improvement Amendments of 1988, (42 United

States Code of Federal Regulations, section 263a) that utilizes microorganisms on the list of select human pathogens for diagnostic, reference, verification, or proficiency testing purposes and is exempt from 42 United States Code of Federal Regulations, section 72.6.

(c) The branch shall notify the department of health of the entry into the State of the microorganism for the purpose of possible inspection and monitoring by the department of health. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-24 List of nonrestricted microorganisms.

(a) The list of nonrestricted microorganisms is comprised of microorganisms classified as low risk.

(b) The list of microorganisms designated as nonrestricted, dated October 25, 2001, is located at the end of this chapter and made a part of this section.

(c) Nonrestricted microorganisms imported for purposes and uses which, in the chief's judgment, are not likely to increase the level of risk above that of a low risk microorganism as defined in section 4-71A-2 may be imported into the State without a permit provided that:

- (1) The importer files a written statement with the chief on a form provided by the department, pursuant to section 4-71A-4; and the branch confirms that the microorganism requested for import is on the list of nonrestricted microorganisms and is from cultured stock; and
- (2) The microorganism meets the pre-entry and inspection requirements of section 4-71A-8 and 4-71-9, respectively.

(d) A request for import of a nonrestricted microorganism for a purpose or use that is likely to increase the level of risk above that described in subsection (a) or a request for import of a

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nonrestricted microorganism strain that is likely to increase the level of risk above that described in subsection (a) shall require a permit approved by the chief provided that the importer can comply with permit conditions in section 4-71A-27, and if applicable, section 4-71A-28.

(e) Microbial products containing microorganisms only on the list of nonrestricted microorganisms are subject to the import requirements for microbial products in subchapter 4. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-25 Unlisted microorganisms. (a) The introduction into Hawaii and possession of a microorganism not on any of the lists of microorganisms included in this chapter may be allowed based on the department's determination of the level of risk presented by the microorganism requested for import and its proposed use as provided below.

(b) An unlisted microorganism that is determined by the department to be a low risk microorganism may be allowed import by a letter of authorization issued by the chief without advisory committee review or board approval.

(c) An unlisted microorganism that is determined by the department to be a moderate risk microorganism may be allowed import by special permit approved by:

- (1) The chief without advisory committee or board approval, provided that the microorganism is for laboratory studies, diagnostics, and analyses, excluding manufacture or production; plant or soil inoculation studies in the laboratory or growth chamber; or cultivation of algal, cyanobacterial and photosynthetic bacterial species in a closed or semi-closed system such as photobioreactor; provided the importer can comply with permit conditions in section 4-71A-27, and if applicable, section 4-71A-28; or
- (2) The board, with advisory committee review,

if the microorganism is for purposes other than those listed in subsection (c)(1), provided that, the importer can comply with permit conditions established by the board.

(d) An unlisted microorganism that is determined by the department to be a high risk microorganism may be allowed import by special permit approved by the board, with advisory committee review, for purposes approved by the board, provided that the importer is able to comply with permit conditions established by the board.

(e) An unlisted microorganism imported by special permit shall be subject to the import, inspection, and standard permit requirements of subchapter 1 of this chapter.

(f) An unlisted microorganism allowed for import will be subsequently proposed for listing on the appropriate list of microorganisms based on the department's determination of the level of risk presented by the microorganism.

(g) A special permit issued under this section is subject to permit conditions established as provided in this section and in subchapter 3. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

SUBCHAPTER 3

PERMIT CONDITIONS

§4-71A-26 Permit conditions. (a) The importation and possession of a microorganism by permit shall be subject to conditions appropriate to eliminate or minimize the risks otherwise associated with the microorganism and its use.

(b) Permit conditions established by rule or by the board include, but are not limited to, restrictions as to time, place, location and use, special precautions, health requirements, and requirements for safeguarding the microorganism from escape, unauthorized release, or theft, as well as any

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applicable requirements of municipal, state, or federal law.

(c) The permittee shall comply with the requirements of this chapter, chapter 150A, HRS, standard permit conditions and, if applicable, supplemental permit conditions established herein or, if the permit requires board action, with permit conditions established by the board.

(d) When an applicant whose request would not otherwise require board action is unable to comply with a permit condition established by rule, the chief in his discretion may forward the request for advisory committee review and board action. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-27 Standard permit conditions. All microorganisms allowed import through permit issued by the chief are subject to the standard permit conditions set forth below, provided that, for each permit, the identity of the microorganism or microorganisms or, alternatively, reference to an attached list of identified microorganisms to be imported, the purpose or purposes for import, permittee's name and address, site including address, and name and title of the person responsible for the particular import shall be inserted, as appropriate, in conditions (1), (2), (4) and (5), respectively:

- (1) The microorganisms, _____, shall be used for _____, a purpose approved by the chief, and shall not be sold, given, transferred or released in Hawaii, unless approved by the chief in writing;
- (2) The permittee, _____, shall be responsible and accountable for all microorganisms imported, from the time of their arrival to their final disposition;
- (3) The microorganisms are subject to the pre-entry requirements of section 4-71A-8 and the inspection requirements of section 4-

- 71A-9;
- (4) The microorganisms shall be safeguarded at _____, a site inspected and approved by the branch prior to importation. Removal of the microorganisms to another site shall require site inspection and prior approval by the chief;
 - (5) The microorganisms shall be maintained by _____ as the responsible person or by trained or certified personnel designated by the responsible person;
 - (6) The permittee shall adhere to the use, facility, equipment, procedures, and safeguards proposed and described in the permit application, as approved;
 - (7) The approved site, microorganisms, and records pertaining to the microorganisms under permit shall be subject to post-entry inspections pursuant to section 4-71A-16;
 - (8) The permittee shall immediately report to the chief any theft, accidental release, exposure, or disease outbreaks involving the microorganisms;
 - (9) Upon completion or termination of the use of the microorganisms, the microorganisms shall be destroyed by autoclaving. In the event autoclaving is not possible, the permittee shall obtain written authorization from the chief for an appropriate alternate method of destruction;
 - (10) The permittee shall submit an annual report of all the microorganisms imported for the calendar year by January 31st of the following year. The report shall include the permit number, scientific name and quantity of each microorganism species imported, and status of use of the microorganisms;
 - (11) The permittee shall submit a final report on the method of destruction of the microorganism species to the chief within 30 days of completion or termination of the use

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- of the microorganisms;
- (12) The permittee shall have available a procedural or safety manual at the time of inspection which identifies the hazards that will or may be encountered, and which specifies practices and procedures designed to minimize or eliminate risks of exposure or contamination;
 - (13) It is the responsibility of the permittee to comply with any applicable requirements of municipal, state, or federal law pertaining to the microorganisms;
 - (14) The permittee shall submit to the chief a copy of all valid licenses, permits, certificates or their equivalent required for the operation of the facility where the microorganisms are safeguarded. The permit issued by the chief may be cancelled upon revocation, suspension, or termination of any of the aforementioned documents required for operation of the facility;
 - (15) Any violation of the permit conditions may result in citation or in cancellation of the permit, or both;
 - (16) A cancelled permit is invalid and upon written notification from the chief, all microorganisms listed on the permit shall not be imported. In the event of permit cancellation, any microorganism species imported may be moved, seized, treated, quarantined, destroyed, or sent out of state at the discretion of the chief. Any expense or loss in connection therewith shall be borne by the permittee;
 - (17) The permit conditions are subject to cancellation or amendment at any time due to changes in statute or administrative rules restricting or disallowing import of the microorganisms or due to Board of Agriculture action disallowing a previously permitted use of the microorganisms; and
 - (18) The permittee shall agree in advance to

defend and indemnify the State of Hawaii, its officers, agents, and employees for any and all claims against the State of Hawaii, its officers, agents, or employees that may arise from or be attributable to any of the microorganisms that are introduced under this permit. This permit condition shall not apply to a permittee that is a federal or State of Hawaii entity or employee, provided that the state employee is a permittee in the employee's official capacity. [Eff. 11/30/01] (Auth: HRS §§150A-5.9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-28 Supplemental permit conditions. The following supplemental permit conditions are established for import of microorganism species on the list of restricted microorganisms, Part B, according to the respective import purpose or use:

- (1) For laboratory studies, diagnostics and analyses: the permittee shall comply with the Centers for Disease Control and Prevention and National Institutes of Health Biosafety Level 2 guidelines for laboratory facility, safety equipment, standard microbiological practices and special practices as found in the current edition of the *Biosafety in Microbiological and Biomedical Laboratories*; or
- (2) For plant or soil inoculation studies in a laboratory or growth chamber:
 - (A) The permittee shall collect and disinfect the runoff prior to disposal into a waste disposal system approved by the branch; and
 - (B) Upon completion or termination of the use of the restricted articles, the inoculated materials shall be destroyed or sterilized by autoclaving.
- (3) For recombinant DNA research: the permittee

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- shall comply with the National Institutes of Health current biosafety level guidelines for recombinant DNA research published in and as amended in the *Federal Register*; or
- (4) For algae, cyanobacteria and photosynthetic bacteria in closed or semi-closed systems such as photobioreactors: the effluent shall be disinfected prior to discharge or routed to a waste-disposal system approved by the branch. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

SUBCHAPTER 4

INTRODUCTION OF MICROBIAL PRODUCTS

§4-71A-29 Introduction of a microbial product.

(a) The introduction into Hawaii and possession of a microbial product is allowed only as provided below.

(b) A microbial product containing only microorganisms on the list of nonrestricted microorganisms, including recombinant DNA strains determined by the department to be low risk, may only be imported into the State through a registration with the branch. A microbial product containing recombinant DNA strains of nonrestricted microorganisms other than strains determined by the department to be low risk shall require a permit for import subject to meeting the requirements of sections 4-71A-4 and, if applicable, 4-71A-7 and 4-71A-10;

(c) A microbial product containing only unlisted microorganism species determined by the department to be low risk microorganisms may be allowed import by letter of authorization subject to meeting the requirements of section 4-71A-4;

(d) A microbial product containing only one or more unlisted microorganism species other than species determined by the department to be low risk microorganism(s) may be allowed import by permit subject to meeting the requirements of sections 4-71A-

4, and if applicable, 4-71A-7 and 4-71A-10; and

(e) A microbial product containing only microorganisms on both the lists of nonrestricted and restricted microorganisms may be allowed import by permit pursuant to sections 4-71A-4, and if applicable, 4-71A-7 and 4-71A-10. [Eff. 11/30/01] Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-30 Microbial product registration. (a) A request to register a microbial product for import into the State shall be submitted to the chief on the department application form in advance of shipment, providing the information required in section 4-71A-4(a)(3), (4), (5), (7), (8) and (9), as well as the following additional information:

- (1) A request to introduce a microbial product into the State under registration;
- (2) A request that the department inspect the microbial product upon arrival in the State;
- (3) Quantity of each microbial product and scientific (genus and species) name of the microorganisms contained in each of the microbial products;
- (4) Material safety data sheet and label that includes the name, brand, or trade mark, ingredient statement, directions for use, and caution or warning statement, name and address of the manufacturer or person for whom manufactured; and
- (5) Description of the method of disposal for the microbial product.

(b) Registration is effective for one year from the date of issuance.

(c) Registration is subject to a fee pursuant to section 4-71A-19(c). [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-31 Conditions of registration. (a) Registered microbial products shall be allowed

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import for distribution, sales, or individual use.

(b) Registered microbial products shall be used in accordance with the product label.

(c) The registrant shall immediately notify the chief in writing of any changes made to the registered microbial product including to the microorganisms contained in the product, product label and use of the product. The written notification shall be submitted to chief in advance of shipment.

(d) Microbial products imported into the State are subject to pre-entry and inspection requirements pursuant to §4-71A-8 and §4-71A-9. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-32 Registration renewal. (a)

Registration of a microbial product may be renewed only when there are no changes in or to the microorganisms contained in the microbial product, product label, or the use of the product as previously registered.

(b) The chief may disapprove a request for renewal of registration for the following reasons:

- (1) Changes declared on the request for registration renewal are, in the chief's judgment, sufficiently significant to require a new registration; or
- (2) The registrant has not deposited or paid bail with respect to any summons or citation issued to the registrant as of the date of the chief's action on the request.

(c) A request to renew the registration of a microbial product shall not be made more than two months prior to the date of expiration.

(d) The registrant shall submit a written request for renewal to the chief with the following statements and information:

- (1) A request to renew registration;
- (2) A request that the department examine the microbial product upon arrival in the state;
- (3) An agreement by the registrant to

- comply with conditions of registration;
- (4) An agreement to be responsible for all costs, charges, or expenses incident to the inspection or treatment of the imported microbial products;
 - (5) A waiver of all claims for damages or losses incident to the inspection, treatment, disinfection, treatment, quarantine, or destruction of the microbial product, if necessary; and
 - (6) A statement that there are no changes in or to the microorganisms contained in the product as previously registered, product label, or use of the product.
- (e) If the request for registration renewal is not submitted within 30 days after the expiration of an existing registration, the request for registration renewal shall be treated as a new registration request and shall be subject to the import requirements and fees of sections 4-71A-19 and 4-71A-30. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-33 Cancellation of registration. The chief may cancel the registration of a microbial product for any of the following reasons:

- (1) Any violation of the conditions of registration;
- (2) A written request by the registrant to cancel registration; or
- (3) The microorganism(s) contained in the microbial product are no longer on the list of nonrestricted microorganisms. [Eff. 11/30/01] (Auth: HRS §§150A-5.9, 150A-6.3) (Imp: HRS §150A-6.3)

§4-71A-34 Import of a microbial product under trade secret claim. (a) Import of a microbial product containing a microorganism for which species identification is claimed by the product's

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manufacturer or shipper to be trade secret shall be subject to special handling to assure confidentiality of the species identification of the microorganism, provided that the manufacturer or shipper and importer comply with branch procedures for notification and accommodation of a trade secret claim.

(b) Notwithstanding the assertion of a trade secret claim as described in subsection (a), the manufacturer or shipper shall disclose to the chief the scientific name or species identification of each microorganism contained in the microbial product requested for import, after which the asserted trade secret data will only be reviewed as necessary by certain persons in the branch's permit and registration review process. To maintain confidentiality, the asserted trade secret data will appear in coded form in written materials at any public meetings at which the import request is considered or in any disclosure of public records.

(c) It is the responsibility of the applicant or permittee to defend a trade secret claim if challenged and prove trade secret status. The department will treat a properly asserted trade secret claim as such and maintain confidentiality for the asserted trade secret data to the extent permitted by law or unless required to disclose the information pursuant to chapter 92F, HRS. If upon challenge, the state Office of Information Practices or a court determines that the scientific name or species identification of a microorganism contained in a microbial product is not a trade secret, subject to the outcome of any appeal, the department will disclose the data.

(d) A microbial product under trade secret claim is subject to the import requirements for microbial products described in this subject.

(e) Both a local importer as applicant and a manufacturer or shipper as co-applicant shall complete and sign an application for import under trade secret claim as provided herein and on branch forms. A trade secret claim under this section will be processed as follows:

(1) The manufacture or shipper shall notify the

chief in writing of a trade secret claim asserted as to species identification of one or more microorganisms contained in a microbial product and shall provide the product name and the name and address of the local importer;

- (2) Upon notification, the chief shall send to the manufacturer or shipper a permit application for import under trade secret claim;
- (3) The manufacturer or shipper shall list on the application the scientific name of each microorganism contained in the product, identifying which microorganisms are asserted to be trade secret protected, and shall complete and sign the application;
- (4) Prior to submitting the completed application to the branch for special handling, the manufacturer or shipper shall send to the importer a copy of the same application, first deleting species identification for those microorganisms in the product asserted to be trade secret protected; and
- (5) The importer shall complete, sign and submit the trade secret data redacted application to the department.

(f) Products containing microorganisms under trade secret claim shall not be listed on the same permit application as products for which no trade secret claim is asserted. [Eff. 11/30/01] (Auth: HRS §§150A-9, 150A-6.3) (Imp: HRS §150A-6.3)

2. Material, except source notes, to be repealed is bracketed. New material is underscored.

3. Additions to update source notes to reflect these amendments are not underscored.

4. These amendments to chapter 4-72, Hawaii Administrative Rules, shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on _____, and filed with the Office of the Lieutenant Governor.

Chairperson, Board of
Agriculture

APPROVED AS TO FORM:

Deputy Attorney General

LIST OF RESTRICTED MICROORGANISMS PART A

Date (month day, year)

SCIENTIFIC NAME

FUNGI

Aethalia - all species in genus
Albugo - all species in genus
Alternaria - all species in genus except:
 A. alternata
 A. geophila
Allomyces - all species in genus
Amanita muscaria
Amanita rubescens
Angiosporus solani
Aphanomyces - all species in genus
Armillaria - all species in genus
Ascobolus stercorarius
Ascochyta - all species in genus
Aspergillus - all species in genus except:
 A. candidus *A. clavatus*
 A. cremeus *A. flavipipes*
 A. flavus *A. fumigatus*
 A. glaucus *A. nidulans*
 A. niger *A. ochraceus*
 A. restrictus *A. terreus*
 A. ustus *A. versicolor*
 A. wentii
Asperisporium - all species in genus

Beauveria - all species in genus except:
 B. bassiana ANT-03
Bipolaris - all species in genus except:
 B. hawaiiensis
Botryodiplodia - all species in genus
Botryosphaeria - all species in genus
Botrytis - all species in genus
Bremia - all species in genus

Calonectria - all species in genus
Ceratocystis - all species in genus
Cercospora - all species in genus
Cercospora - all species in genus
Choanephora - all species in genus
Cionothrix - all species in genus

SCIENTIFIC NAME

Cladosporium - all species in genus except:

C. bantianum *C. carrionii*
C. trichoides

Claviceps purpurea

Cochliobolus - all species in genus

Colletotrichum - all species in genus

Corticium - all species in genus

Cylindrocladium - all species in genus

Cylindrosporium - all species in genus

Diaporthe - all species in genus

Digitatispora marina

Didymella - all species in genus

Didymium nigripes

Diplodia - all species in genus

Dothiorella berengeriana

Dothistroma pini

Drechslera - all species in genus except:

D. hawaiiensis *D. rostrata*
D. spicifera

Elsinoe - all species in genus

Emericella varicolor

Endothia - all species in genus

Erysiphe - all species in genus

Exobasidium - all species in genus

Exserohilum - all species in genus except:

E. mcginnisii
E. rostratum

Fulvia - all species in genus

Gibberella - all species in genus

Gliomastix inflata

Gloeosporium - all species in genus

Glomerella - all species in genus

Gnomonia - all species in genus

Guignardia - all species in genus

Gymnoconia - all species in genus

Helminthosporium - all species in genus

Heterobasidium - all species in genus

Histoplasma farciminosum

Hypoxylon - all species in genus

Kuehneola - all species in genus

Lenzites - all species in genus

SCIENTIFIC NAME

Macrophoma - all species in genus
Macrophomina - all species in genus
Madurella - all species in genus
Mahabalella - all species in genus
Marasmius - all species in genus except:
 M. oreades
Marssonina - all species in genus
Metarhizium - all species in genus
Microcyclus ulei
Microspheera - all species in genus
Monosporascus - all species in genus
Mucor - all species in genus except:
 M. hiemalis *M. pusillus*
 M. ramannianus *M. ramosissimus*
Mycena citricolor
Myrothecium - all species in genus

Nectria - all species in genus

Orbimyces spectabilis

Paracoccidioides brasiliensis
Peniophroa - all species in genus
Peronospora - all species in genus
Pestalotia - all species in genus
Pestalotiopsis - all species in genus
Phakopsora pachyrhizi
Pholiota - all species in genus
Phoma - all species in genus except:
 P. glomerata *P. hibernica*
 P. oculo-hominis
Phomopsis - all species in genus
Phragmidium - all species in genus
Phyllactinia - all species in genus
Phyllostica - all species in genus
Phymatotrichopsis omnivora
Physoderma - all species in genus
Phytophthora - all species in genus
Plasmodiophora - all species in genus
Plasmopara - all species in genus
Podosphaera - all species in genus
Polyporus - all species in genus
Poria - all species in genus
Poronia oedipus
Prospodium tuberculatum
Pseudocercospora - all species in genus
Pseudoperonospora - all species in genus
Puccinia - all species in genus

SCIENTIFIC NAME

Pyrenophora - all species in genus
Pyricularia - all species in genus
Pyriculariopsis - all species in genus
Pythium - all species in genus

Ramularia - all species in genus
Rhizoctonia - all species in genus
Rozella allomyces

Schizophyllum - all species in genus
Sclerospora - all species in genus
Sclerotinia - all species in genus
Sclerotium - all species in genus
Scopulariopsis - all species in genus except:
 S. brevicaulis
 S. brumptii

Septoria - all species in genus
Sphaceloma - all species in genus
Sphacelotheca - all species in genus
Sphaerotheca - all species in genus
Sporothrix - all species in genus except:
 S. schenckii

Stemonitis flavogenita
Stereum - all species in genus
Synchytrium enfobioticum

Thanatephorus - all species in genus
Thielaviopsis - all species in genus
Tilletia - all species in genus
Trichophaea abundans

Uncinula - all species in genus
Urocystis - all species in genus
Uromyces - all species in genus
Ustilago - all species in genus

Verticillium - all species in genus except:
 V. graphii

Xylaria - all species in genus

BACTERIA

Bartonella - all species in genus

SCIENTIFIC NAME

Brucella - all species in genus except:

B. abortus

B. melitensis

B. suis

Chlamydia psittaci avian strains

Corynebacterium (=Clavibacter) *michiganensis*

subsp. *insidiosus*

Coconut lethal yellowing mycoplasma like organism

Curtobacterium flaccumbaciens

Elsinoe australis

Erwinia amylovora

Erwinia cartovora

Erwinia stewartii

Fastidious bacterium (citrus greening disease)

Guidgnardia citircarpa

Mycobacterium avium

Mycobacterium bovis

Mycobacterium tuberculosis

Mycoplasma agalactiae

Mycoplasma mycoides

Pasteurella multocida type B

("buffalo" and other foreign virulent strains)

Phytoplasmas - Diseases caused by phytoplasmas (formerly

known as mycoplasma like organisms (MLOs))

Pseudomonas solanacearum

Ralstonia solanacearum

Rickettsia - all species in genus except:

R. prowazekii

R. rickettsii

Salmonella typhi

Xanthomonas campestris pv. *citri*

Xanthomonas campestris pv. *citricarpa*

Xanthomonas campestris pv. *vasculorum*

Xanthomonas oryzae pv. *oryzae*

Xanthomonas oryzae pv. *oryzicola*

SCIENTIFIC NAME

CYANOBACTERIA

Anabaena - all species in genus
Aureococcus anophagefferens

Cylindrospermum - all species in genus

Microcystis - all species in genus

Nodularia - all species in genus

Pseudanabaena - all species in genus

Xenococcus - all species in genus

PLANT VIRUSES

abutilon mosaic virus
African cassava mosaic virus
Arabis mosaic virus

baculoviruses
banana bunchy top virus
banana badnavirus
banana mosaic virus
bean golden mosaic virus
bean yellow mosaic virus
broad bean strain virus
brome mosaic virus

cacao swollen shoot virus
carnation ring (cadang viroid)
citrus tristeza virus
citrus tristeza virus (mild strains)
coconut virus
cucumber mosaic virus
cymbidium mosaic virus

maize mosaic virus
odontoglossum ringspot virus

papaya ringspot virus-p (PRSV-p strain) except
PRSV-p mild strain
papaya ringspot virus-w (PRSV-w strain)
pineapple badnavirus
pineapple closterovirus

SCIENTIFIC NAME

MCM virus (maize chlorotic mottle)
MRD virus (maize rough dwarf)
MRF virus (maize rayado fino)
maize streak virus
maize stripe virus

potato mop-top virus
potato virus T
potato Y virus
potato yellowed dwarf virus
Prunus necrotic ringspot virus

rice dwarf virus

satuma dwarf virus
sharka (plume pox) virus
southern bean mosaic virus
sugarcane badnavirus
Sugarcane Fiji disease virus

tobacco mosaic virus
tobacco ringspot virus
tomato black ring (anepo virus)
tomato mosaic virus
tomato ringspot virus
tomato spotted wilt virus
tomato yellow leaf curl virus
turnip mosaic virus

veinal necrosis virus

watermelon mosaic 1 virus
watermelon mosaic 2 virus

zucchini yellow mosaic virus

HUMAN AND ANIMAL VIRUSES

African horse sickness virus
African swine fever virus
Akabane virus
Aujeszky disease virus
avian influenzae

bluetongue virus
Borna disease virus

SCIENTIFIC NAME

bovine infectious petechial fever agent
bovine spongiform encephalopathy (a prion)
Bunyavirus group

camelpox virus
chikungunya virus
classical swine fever virus
Coronavirus group
channel catfish virus
Creutzfeldt-Jacob Disease variant, bovine spongiform

dengue virus (types 1-4)

ephermeral fever virus

foot and mouth disease virus

hog cholera virus
human immunodeficiency virus (type 1-2)
human T-cell lymphotropic viruses

Japanese B encephalitis

lumpy skin disease virus
lymphocytic choriomeningitis virus
lymphocytic choriomeningitis (neurotropic) virus

monkey pox virus
Morbillivirus

Nairobi sheep disease virus
Newcastle disease virus

Parvovirus (human)
Peste des pestitis ruminants virus
Polyomavirus (BK and JC viruses)
Porcine enterovirus type 9

rabies virus
rinderspest virus

Semliki Forest virus
sheep and goat pox virus
Sindbis virus
swine vesicular disease virus

vesicular exantema virus
Vesicular stomatitis virus

SCIENTIFIC NAME

viral hemorrhagic disease of rabbits

Wesselsbron disease virus

Western equine encephalomyelitis virus

white pox virus

ALGAE

Alexandria monilata

Alexandrium sp.

Chrysochromulina - all species in genus

Gamblerdiscus toxicus

Gymnodinium aureolaum

Gymnodinium breve

Osteropsis lenticularis

Osteroopsis siamensis

Pflesteria-like dinoflagellates

Prorocentrum hoffmannianum

Prorocentrum lima

Pseudo-nitzschia australis

Pseudo-nitzschia pungens f. *multiseries*

LIST OF RESTRICTED MICROORGANISMS PART B

October 25, 2001

SCIENTIFIC NAME

FUNGI

Absidia - all species in genus except:

A. coerulea *A. corymbifera*
A. ramosa *A. spinosa*

Acremonium - all species in genus except:

A. falciforme *A. kiliense*
A. recifei *A. vitis*

Agaricus - all species in genus except:

A. bitorquis *A. bisporus*
A. campestris *Agaricus sp.* (Portabello mushroom)

Allescheria boydii

Aureobasidium - all species in genus except:

A. pullulans

Basidiobolus ranarum

Blakeslea trispora

Blastoschizomyces - all species in genus except:

B. capitatus

Brettanomyces - all species in genus

Candida - all species in genus except:

C. albicans *C. famata*
C. geochares *C. glabrata*
C. humicola *C. immitis*
C. kefyr *C. krusei*
C. lipolytica *C. lusitaniae*
C. parapsilosis *C. pseudotropicalis*
C. quilliermondii *C. rugosa*
C. stellatoidea *C. tropicalis*
C. zeylanoides

Chaetomium - all species in genus except:

C. globosum

Chalaropsis - all species in genus

Chrysosporium - all species in genus except:

C. keratinophilum *C. liquorum*
C. pruinatum

SCIENTIFIC NAME

Cryptococcus - all species in genus except:

<i>C. albidus</i>	<i>C. gastricus</i>
<i>C. huminocola</i>	<i>C. laurentii</i>
<i>C. luteolus</i>	<i>C. neoformans</i>
<i>C. terreris</i>	<i>C. uniguttulatus</i>

Cunninghamella - all species in genus except:

<i>C. bertholletiae</i>	<i>C. blakesleena</i>
<i>C. elegans</i>	

Curvularia - all species in genus except:

<i>C. geniculata</i>
<i>C. lunata</i>

Entomophthora coronata

Epicoccum - all species in genus except:

<i>E. nigrum</i>

Epidermophyton - all species in genus except:

<i>E. floccosum</i>

Exophiala - all species in genus except:

<i>E. dermatitidis</i>	<i>E. jeanselmei</i>
<i>E. spinifera</i>	<i>E. werneckii</i>

Fonsecaea - all species in genus except:

<i>F. compacta</i>
<i>F. pedrosoi</i>

Fusarium - all species in genus

Geotrichium - all species in genus except:

<i>G. candidum</i>
<i>G. penicillatum</i>

Gliocladium - all species in genus except:

<i>G. roseum</i>

Glomus - all species in genus except:

<i>G. brasilianum</i>	<i>G. clarum</i>
<i>G. deserticola</i>	<i>G. etunicatum</i>
<i>G. fasciculatum</i>	<i>G. intraradices</i>
<i>G. monosporus</i>	<i>G. mosseae</i>

Hansenula - all species in genus except:

<i>H. anomala</i>	<i>H. pollymorpha</i>
<i>H. wingei</i>	

Hormodendrom pedrosoi

Hyphochytrium catenodites

Lagenidium giganteum

Macrosporium laminarianum

SCIENTIFIC NAME

Malassezia - all species in genus except:

M. furfur

M. pachydermatis

Mortierella ramannianda var. *angulispora*

Neurospora - all species in genus except:

N. crassa

N. tetrasperma

Nigrospora - all species in genus except:

N. oryzae

Phialophora - all species in genus except:

P. bubakii

P. parasitica

P. repens

P. richardsiae

P. verrucosa

Pichia - all species in genus except:

P. canadensis

P. pastoris

Pilobolus - all species in genus

Pleurotus - all species in genus except:

P. cystidiosus

P. djamor

P. ostreatus

P. sajor-caju

Pseudoallescheria - all species in genus except:

P. boydii

Rhizomucor - all species in genus

Rhizopus - all species in genus except:

R. stolonifer

Saccharomycopsis - all species in genus

Schizosaccharomyces - all species in genus

Sordaria - all species in genus except:

S. fimicola

Sporobolomyces - all species in genus except:

S. salmonicolor

Sporotrichum - all species in genus except:

S. pruinosum

Stemphylium - all species in genus except:

S. sarcinaeforme

Trichoderma - all species in genus except:

T. harzianum

T. virens

T. viridae

Trichothecium - all species in genus except:

T. roseum

Ulocladium - all species in genus except:

U. atrum

SCIENTIFIC NAME

Actinomadura - all species in genus except:
 A. madurae
 A. pelletieri
Actinoplanes philippinensis
Actinomyces - all species in genus except:
 A. odontolyticus
 A. pyrogenes
Aerococcus - all species in genus except:
 A. viridans
Aeromonas - all species in genus except:
 A. caviae *A. hydrophila*
 A. sobria *A. veronii*
Agrobacterium - all species in genus
Alcaligenes - all species in genus except:
 A. acidocaldarius *A. acidoterrestris*
 A. cupidus *A. cycloheptanicus*
 A. dispar *A. eutrophus*
 A. faecalis *A. viscolactis*
 A. viscosus
Alteromonas - all species in genus except:
 A. putrefaciens
Aquaspirillum - all species in genus
Arachnia propionica
Arcanobacterium - all species in genus except:
 A. haemolyticum
Arizona - all species in genus except:
 A. hinshawii
Arthrobacter - all species in genus except:
 A. agalis *A. citreus*
 A. crystallopoietes *A. globiformis*
 A. marinus *A. paraffineus*
Aureobacterium - all species in genus

Bifidobacterium - all species in genus
Brevundimonas - all species in genus

Capnocytophaga - all species in genus
Cardiobacterium - all species in genus
Caulobacter bacteroides
Chlorobium - all species in genus
Chromatium - all species in genus except:
 C. warmingii
Chryseomonas - all species in genus
Clavibacter - all species in genus except:
 C. michiganensis subsp. insidiosus
Comamonas - all species in genus except:
 C. testosteroni

SCIENTIFIC NAME

Curtobacterium - all species in genus except:
C. flaccumbaciens

Desulfotomaculum ruminis

Edwardsiella - all species in genus except:
E. tarda

Ectothiorhodospira - all species in genus

Eikenella - all species in genus except:
E. corrodens

Enterococcus - all species in genus except:
E. avium *E. durans*
E. faecalis *E. faecium*
E. hirae

Erwinia - all species in genus except:
E. amylovora *E. cartovora*
E. stewartii *E. dissolvens*

Eubacterium - all species in genus except:
E. lentum

Flavobacterium - all species in genus except:
F. multivorum *F. meningosepticum*
F. odoratum

Flexibacter - all species in genus

Francisella - all species in genus except:
F. tularensis

Gemella - all species in genus

Halobacterium - all species in genus except:
H. salinarium

Haemophilus - all species in genus except:
H. ducreyi *H. influenzae*
H. parahaemolyticus *H. paraphrophilus*
H. parasuis *H. sommus*

Kingella - all species in genus except:
K. kingae

Lactococcus - all species in genus except:
L. cremoris
L. lactis

Leuconostoc - all species in genus except:
L. citrovorum *L. cremoris*
L. mesenteroides

SCIENTIFIC NAME

Methanococcus - all species in genus

Methylobacterium - all species in genus

Microbacterium imperiale

Microscilla - all species in genus

Morganella - all species in genus except:

M. morganii

Moraxella - all species in genus except:

M. catarrhalis

M. ureolytica

M. urethralis

M. osloensi

Neisseria - all species in genus except:

N. cinerea

N. flavascens

N. gonorrhoeae

N. lactamica

N. meningitidis

N. mucosa

N. perfalva

N. sicca

N. subflava

Norcardia farcinia

Nocardiopsis - all species in genus except:

N. dassonvillei

Ochrobactrum - all species in genus

Oerskovia - all species in genus except:

O. xanthieolytica

Oligella - all species in genus except:

O. ureolytica

O. urethralis

Pasteurella pestis avirulent strain

Peptostreptococcus - all species in genus except:

P. anaerobium

P. elsdenii

P. magnus

P. micros

Polysphondylium pallidum

Polysphondylium violaceum

Porphyromonas - all species in genus except:

P. asaccharolytica

P. gingivalis

P. levii

Providencia - all species in genus

Prevotella - all species in genus except:

P. intermedia

P. loeschii

P. melaninogenica

Propionibacterium - all species in genus except:

P. acidipropionici

P. acnes

P. freudenreichii

P. jensenii

P. pentosaceum

P. shermanii

P. technicum

P. thoenii

Prosthecochloris - all species in genus

Proteus - all species in genus except:

P. mirabilis

P. penneri

P. rettgeri

P. vulgaris

SCIENTIFIC NAME

Pseudomonas - all species in genus except:

<i>P. acidovorans</i>	<i>P. aeruginosa</i>
<i>P. alcaligenes</i>	<i>P. andropogonis</i>
<i>P. avenae</i>	<i>P. caryophyllii</i>
<i>P. cattleyae</i>	<i>P. cepacia</i>
<i>P. cichorii</i>	<i>P. citronellolis</i>
<i>P. delafieldii</i>	<i>P. denitrificans</i>
<i>P. facilis</i>	<i>P. flava</i>
<i>P. flectens</i>	<i>P. fluorescens</i>
<i>P. fuscovaginae</i>	<i>P. gladioli</i>
<i>P. glumae</i>	<i>P. lucifera</i>
<i>P. mallei</i>	<i>P. marginalis</i>
<i>P. nactus</i>	<i>P. nigrifaciens</i>
<i>P. oleovorans</i>	<i>P. oryzicola</i>
<i>P. palleronii</i>	<i>P. phaseolicola</i>
<i>P. pickettii</i>	<i>P. pseudoalcaligenes</i>
<i>P. pseudoflava</i>	<i>P. pseudomallei</i>
<i>P. putida</i>	<i>P. rubrilineans</i>
<i>P. saccharophila</i>	<i>P. solanacearum</i>
<i>P. stutzeri</i>	<i>P. syringae</i>
<i>P. testosteroni</i>	<i>P. viridiflava</i>
<i>P. woodsii</i>	

Rhodomicrobium - all species in genus

Shewanella - all species in genus except:

S. putrefaciens

Sphingobacterium - all species in genus except:

S. multivorum

S. serpens

Sphingomonas paucimobilis

Stenotrophomonas - all species in genus except:

S. maltophilia)

Stomatococcus - all species in genus

Streptobacillus moniliformis

Streptosporangium roseum

Thiobacillus - all species in genus except:

T. dinitrificans

T. thioparus

Thiocystis - all species in genus

Thiodictyon - all species in genus

Thiospirillum - all species in genus

Variovorax - all species in genus

Veillonella - all species in genus except:

V. alcalescens

V. parvula

SCIENTIFIC NAME

Vibrio - all species in genus except:

<i>V. adaptatus</i>	<i>V. alginus</i>
<i>V. anguillarum</i>	<i>V. fischeri</i>
<i>V. haloplanktis</i>	<i>V. marinus</i>
<i>V. marinagilis</i>	<i>V. marino vulgaris</i>
<i>V. marinofulvus</i>	<i>V. noctiluca</i>
<i>V. parahemolyticus</i>	<i>V. vulnificus</i>

Xanthomonas - all species in genus except:

X. campestris pv. *citri*
X. campestris pv. *citricarpa*
X. campestris pv. *vasculorum*
X. oryzae pv. *oryzae*
X. oryzae pv. *oryzicola*

CYANOBACTERIA

Aphanizomenon flos-aquae

Calothrix - all species in genus

Chamaesiphon - all species in genus

Chlorogloeopsis - all species in genus

Chroococciopsis - all species in genus

Dermocarpa - all species in genus

Fischerella - all species in genus

Gloeobacter - all species in genus

Gloeotheca - all species in genus

Gloeocapsa - all species in genus

Hapalosiphon - all species in genus

Lyngbya - all species in genus

Microcoleus - all species in genus

Nostoc - all species in genus

Oscillatoria - all species in genus

Phormidium - all species in genus

Plectonema - all species in genus

Porphyrosiphon notarisii

SCIENTIFIC NAME

Schizothrix - all species in genus
Scytonema - all species in genus
Spirulina - all species in genus
Symphyonemopsis kataiensis
Symploca muscorum
Synechococcus - all species in genus
Synechocystis - all species in genus

Tolypothrix - all species in genus

PLANT VIRUSES

mild strain of papaya ringspot virus-p
(PRSV-p mild strain)
zucchini yellow mosaic virus-weak strain

ALGAE

Achnanthes - all species in genus
Amphidinium - all species in genus
Amphiprora - all species in genus
Amphora - all species in genus
Anadyomene - all species in genus
Ankistrodesmus - all species in genus
Astasia - all species in genus
Asterococcus - all species in genus
Astrephomene - all species in genus
Atractomorpha - all species in genus
Axilosphaera - all species in genus

Bangia - all species in genus
Basycladia - all species in genus
Batrachospermum - all species in genus
Boergesenia - all species in genus
Botryococcus - all species in genus
Borodinella - all species in genus
Borodinellopsis - all species in genus
Botrydiopsis - all species in genus
Botrydium - all species in genus
Brachiomonas - all species in genus
Bracteacoccus - all species in genus
Bulbochaete - all species in genus
Bumilleriopsis - all species in genus

SCIENTIFIC NAME

Callithamnion - all species in genus
Calyptrosphaera -all species in genus
Capsosiphon - all species in genus
Carteria - all species in genus
Cephaleuros - all species in genus
Chaetoceros concavicornis
Chaetoceros convolutus
Chaetomorpha - all species in genus
Chaetopeltis - all species in genus
Chaetophora - all species in genus
Characium - all species in genus
Chattonella - all species in genus
Chlamydomonas - all species in genus
Chlorochytrium - all species in genus
Chlorocloster - all species in genus
Chlorococcum - all species in genus
Chlorogonium - all species in genus
Chlorosarcina - all species in genus
Chlorosarcinopsis - all species in genus
Chodatella - all species in genus
Chromulina - all species in genus
Chroomonas - all species in genus
Chrysosphaera - all species in genus
Cladophoropsis - all species in genus
Closteriopsis - all species in genus
Closterium - all species in genus
Coccolithophora - all species in genus
Coccolithus - all species in genus
Coccomyxa - all species in genus
Coelastrum - all species in genus
Colacium - all species in genus
Coleochaete - all species in genus
Compsopogon - all species in genus
Coronastrum - all species in genus
Cosmarium - all species in genus
Cricosphaera - all species in genus
Crucigeneiella - all species in genus
Crucigenia - all species in genus
Cryptoglana - all species in genus
Cryptochrysis - all species in genus
Cryptomonas - all species in genus
Ctenocladus - all species in genus
Cyanidium - all species in genus
Cyclotella - all species in genus
Cylindrocapsa - all species in genus
Cylindrocystis - all species in genus
Cylindrotheca - all species in genus

SCIENTIFIC NAME

Dactylococcus - all species in genus
Desmidium - all species in genus
Dichotomosiphon - all species in genus
Dicrateria - all species in genus
Dictyosphaeria - all species in genus
Dimorphococcus - all species in genus
Dinobryon - all species in genus
Distigma - all species in genus
Draparnaldia - all species in genus
Dysmorphococcus - all species in genus

Ectocarpus - all species in genus
Elakatothrix - all species in genus
Ellipsoidon - all species in genus
Emiliana - all species in genus
Entocladia - all species in genus
Eremosphaera - all species in genus
Euastrum - all species in genus
Eudorina - all species in genus
Eunotia - all species in genus
Eustigamatos - all species in genus
Eutreptia - all species in genus

Franceia - all species in genus
Fritschiella - all species in genus

Galdieria - all species in genus
Gelidium - all species in genus
Glenodinium - all species in genus
Gloeocystis - all species in genus
Gloeodinium - all species in genus
Gloeothamnion - all species in genus
Golenkinia - all species in genus
Gonatozygon - all species in genus
Gongrosira - all species in genus
Gonyostomum - all species in genus
Gloeomonas - all species in genus
Gracilaria - all species in genus
Gymnodinium - all species in genus except:
 G. aureollaum
 G. breve

Haematococcus - all species in genus
Hemiselmis - all species in genus
Heterococcus - all species in genus
Heteromastix - all species in genus
Heterothrix - all species in genus
Hormotila - all species in genus

SCIENTIFIC NAME

Hormotilopsis - all species in genus
Hyalotheca - all species in genus
Hymenomonas - all species in genus
Hypnomonas - all species in genus

Kirchneriella - all species in genus
Klebsormidium - all species in genus

Laurencia - all species in genus
Lepocinclis - all species in genus
Leptosira - all species in genus
Lobomonas - all species in genus

Macrocystis pyrifera

Menoidium - all species in genus
Mesotaenium - all species in genus
Micrasterias - all species in genus
Microdictyon - all species in genus
Microspora - all species in genus
Microthamnion - all species in genus
Mischococcus - all species in genus
Monas (=Streptomonas) - all species in genus
Monodus - all species in genus
Mougeotia - all species in genus
Myrmecia - all species in genus

Nannochloris - all species in genus
Neospongiococcum - all species in genus
Netrium - all species in genus

Neochloris - all species in genus
Nephrochloris - all species in genus
Nephroselmis - all species in genus
Nitella - all species in genus
Nitzschia - all species in genus

Oedocladium - all species in genus
Oedogonium - all species in genus
Olistodiscus (=Heterosigma) - all species in genus
Onychonema (=Sphaeroszoma) - all species in genus
Ophiocytium - all species in genus
Ourococcus - all species in genus
Oxyrrhia - all species in genus

Palmella - all species in genus
Palmellopsis - all species in genus
Paulschulzia - all species in genus
Pectodictyon - all species in genus

SCIENTIFIC NAME

Pedinomonas - all species in genus
Penium - all species in genus
Phacotus - all species in genus
Phacus - all species in genus
Phaeodactylum - all species in genus
Percursaria - all species in genus
Peridinium - all species in genus
Physocytium - all species in genus
Pithophora - all species in genus
Pleurotaenium - all species in genus
Planktosphaeria - all species in genus
Planophila - all species in genus
Platydorina - all species in genus
Platymonas - all species in genus
Pleodorina - all species in genus
Pleurastrum - all species in genus
Pleurochloris - all species in genus
Pleurochrysis - all species in genus
Polytoma - all species in genus
Polytomella - all species in genus
Porphyra tenera
Porphyra yezoensis
Porphyridium - all species in genus
Prasinocladus - all species in genus
Protosiphon - all species in genus
Pseudendoclonium - all species in genus
Pseudocharaciopsis - all species in genus
Pseudocharacium - all species in genus
Pseudopleurococcus - all species in genus
Pseudotetracystis - all species in genus
Pseudotreboxia - all species in genus
Pterocladia - all species in genus
Pteromonas - all species in genus
Pulchraspaera - all species in genus
Pyramimonas - all species in genus
Pyrobotrys (=Uva) - all species in genus

Radiofilum - all species in genus
Radiosphaera (=Actinochloris) - all species in genus
Raphidonema - all species in genus
Rhabdomonas - all species in genus
Rhizoclonium - all species in genus
Rhodamonas - all species in genus
Roya - all species in genus

Sarcinochrysis - all species in genus
Scenedesmus - all species in genus
Schizomeris - all species in genus

SCIENTIFIC NAME

Selenastrum - all species in genus
Siphonocladus - all species in genus
Sirogonium - all species in genus
Spirotaenia - all species in genus
Spongiochloris - all species in genus
Staurostrum - all species in genus
Stephanoptera - all species in genus
Stichococcus - all species in genus
Stigeoclonium - all species in genus
Stephanosphaera - all species in genus
Struvea - all species in genus
Synura - all species in genus

Teradesmus (=Tetradesmus) - all species in genus
Tetracystis - all species in genus
Tetraedon - all species in genus
Tetrallantos - all species in genus
Tetraspora - all species in genus
Trachelomonas - all species in genus
Trebouxia - all species in genus
Trentepohlia - all species in genus
Tribonema - all species in genus
Trichosarcina - all species in genus
Trochischia - all species in genus

Ulothrix - all species in genus

Valonia - all species in genus
Vaucheria - all species in genus
Vischeria - all species in genus
Volvulina - all species in genus

Wislouchiella - all species in genus

Zooxanthella - all species in genus

PROTOZOA

Acanthamoeba - all species in genus except:
A. castellani

Entamoeba - all species in genus except:
E. histolytica *E. coli*
E. gingivalis *E. hartamanii*

SCIENTIFIC NAME

Mansonella - all species in genus except:

M. ozzardi

M. perstans

Nosema - all species in genus

Trichomonas - all species in genus except:

T. hominis

T. tenax

T. vaginalis

Trypanosoma - all species in genus

LIST OF SELECT HUMAN PATHOGENS

October 25, 2001

SCIENTIFIC NAME

FUNGI

Coccidioides immitis

BACTERIA

Bacillus anthracis
Brucella abortus
Brucella melitensis
Brucella suis
Burkholderia (Pseudomonas) mallei
Burkholderia (Pseudomonas) pseudomallei
Clostridium botulinum
Coxiella burnetii
Francisella tularensis
Rickettsia prowazekii
Rickettsia rickettsii
Yersinia pestis

VIRUSES

Crimean-Congo haemorrhagic fever virus
Eastern Equine Encephalitis virus
Ebola viruses
Equine Morbillivirus (Hendra virus)
Lassa fever virus
Marburg virus
Rift Valley fever virus
South American Haemorrhagic fever viruses
Tick-borne encephalitis complex viruses
Omsk hemorrhagic fever
Russian spring-Summer encephalitis
Variola major virus (Smallpox virus)
Venezuelan Equine Encephalitis virus
Viruses causing hantavirus pulmonary syndrome
Yellow fever virus

LIST OF NONRESTRICTED MICROORGANISMS

Date (month day, year)

SCIENTIFIC NAME

FUNGI

Absidia coerulea
Absidia corymbifera
Absidia ramosa
Absidia spinosa
Acremonium falciforme
Acremonium kiliense
Acremonium recifei
Acremonium vitis
Agaricus bitorquis
Agaricus bisporus
Agaricus campestris
Agaricus sp. (Portabello mushroom)
Alternaria alternata
Alternaria geophila
Apiotrichum humicola
Arthrotrichum - all species in genus
Aspergillus candidus
Aspergillus clavatus
Aspergillus cremeus
Aspergillus flavipipes
Aspergillus flavus
Aspergillus fumigatus
Aspergillus glaucus
Aspergillus nidulans
Aspergillus niger
Aspergillus ochraceus
Aspergillus restrictus
Aspergillus terreus
Aspergillus ustus
Aspergillus versicolor
Aspergillus wentii
Asteromyces cruciatus
Aureobasidium pullulans
Auricularia polytricha

Beauveria bassiana ANT-03
Bipolaris hawaiiensis
Blastomyces dermatitidis
Blastoschizomyces capitatus
Boletus californicus
Boletus granulatus
Boletus luteus

SCIENTIFIC NAME

Boletus variegatus
Byssochlamys fulva

Candida albicans
Candida famata
Candida geochares
Candida glabrata
Candida humicola
Candida kefyr
Candida krusei
Candida lipolytica
Candida lusitaniae
Candida parapsilosis
Candida pseudotropicalis
Candida quilliermondii
Candida rugosa
Candida stellatoidea
Candida tropicalis
Candida zeylanoides
Candelabrella - all species in genus
Chaetomium globosum
Chrysosporium keratinophilum
Chrysosporium liquorum
Chrysosporium pruinatum
Cladosporium bantianum
Cladosporium carrionii
Cladosporium trichoides
Collybia velutipes
Cryptococcus albidus
Cryptococcus gastricus
Cryptococcus huminocola
Cryptococcus laurentii
Cryptococcus luteolus
Cryptococcus neoformans
Cryptococcus terreus
Cryptococcus uniguttulatus
Cunninghamella bertholletiae
Cunninghamella blakesleena
Cunninghamella elegans
Curvularia geniculata
Curvularia lunata

Dactylaria - all species in genus
Dactylella - all species in genus
Dendryphiella saliva
Dipodascus uninucleatus
Drechslera hawaiiensis
Drechslera rostrata
Drechslera spicifera

SCIENTIFIC NAME

Entrophospora columbiana
Epicoccum nigrum
Epidermophyton floccosum
Eremothecium ashbyii
Exophiala dermatitidis
Exophiala jeanselmei
Exophiala spinifera
Exophiala werneckii
Exserohilum mcginnisii
Exserohilum rostratum

Filobasidiella neoformans
Fonsecaea compacta
Fonsecaea pedrosoi

Geotrichum candidum
Geotrichum penicillatum
Gigaspora margarita
Gliocladium roseum
Glomus brasilianum
Glomus clarum
Glomus deserticola
Glomus etunicatum
Glomus fasciculatum
Glomus intraradices
Glomus monosporus
Glomus mosseae
Gymnoascus reesi

Hansenula anomala
Hansenula pollymorpha
Hansenula wingei
Humicola alopallonella

Issatchenkia orientalis

Lentinus edodes

Malassezia furfur
Malassezia pachydermatis
Malbranchea cinnamomea
Malbranchea pulchella
Malbranchea sulfurea
Marasmius oreades
Microsporium - all species in genus
Monosporium apiospermum
Mortierella alpina
Mucor hiemalis

SCIENTIFIC NAME

Mucor pusillus
Mucor ramannianus
Mucor ramosissimus

Neurospora crassa
Neurospora tetrasperma
Nigrospora oryzae

Paecilomyces - all species in genus
Penicillium - all species in genus
Phaeoannellomyces werneckii
Phialophora bubakii
Phialophora parasitica
Phialophora repens
Phialophora richardsiae
Phialophora verrucosa
Phoma glomerata
Phoma hibernica
Phoma oculo-hominis
Phycomyces blakesleeanus
Pichia canadensis
Pichia pastoris
Pisolithus tinctorius
Pleurotus cystidiosus
Pleurotus djamor
Pleurotus ostreatus
Pleurotus sajor-caju
Pseudallescheria boydii

Rhizopus stolonifer
Rhodosporidium - all species in genus
Rhodotorula - all species in genus
Riessia semiophora

Saccharomyces - all species in genus
Saccharomycodes ludwigii
Scedosporium - all species in genus
Scopulariopsis brevicaulis
Scopulariopsis brumptii
Sepedonium - all species in genus
Sordaria fimicola
Sporobolomyces salmonicolor
Sporotrichum pruinosum
Sporothrix schenckii
Stemphylium sarcinaeforme
Syncephalastrum - all species in genus
Stropharia rugosoannulata

Torulopsis - all species in genus

SCIENTIFIC NAME

Trichoderma harzianum
Trichoderma virens
Trichoderma viridae
Trichophyton - all species in genus
Trichosporon - all species in genus
Trichothecium roseum

Ulocladium atrum

Varicosporina ramulosa
Verticillium graphii
Volvariella volvacea

Wangiella dermatitidis

Yarrowia lipolytica

Zygosaccharomyces bailii
Zygosaccharomyces bisporus
Zygosaccharomyces rouxii

SLIME MOLD

Dictyostelium discoideum
Physarum polycephalum

BACTERIA

Acetobacter aceti
Acetobacter oxydans
Acetobacter suboxydans
Achromobacter fischeri
Acidaminococcus fermentans
Acidovorax delafieldii
Acidovorax facilis
Acinetobacter baumannii
Acinetobacter calcoaceticus
Acinetobacter haemolyticus
Acinetobacter lwofii
Actinobacillus pleuropneumoniae
Actinobacillus suis
Actinomadura madurae
Actinomadura pelletieri
Actinomyces odontolyticus
Actinomyces pyrogenes

SCIENTIFIC NAME

Aerobacter aerogenes
Aerobacter alroynis
Aerococcus viridans
Aeromonas caviae
Aeromonas hydrophila
Aeromonas sobria
Aeromonas veronii
Alcaligenes acidocaldarius
Alcaligenes acidoterrestris
Alcaligenes cupidus
Alcaligenes cycloheptanicus
Alcaligenes dispar
Alcaligenes eutrophus
Alcaligenes faecalis
Alcaligenes viscolactis
Alcaligenes viscosus
Alteromonas putrefaciens
Arcanobacterium haemolyticum
Arizona hinshawii
Arthrobacter agalis
Arthrobacter citreus
Arthrobacter crystallopoietes
Arthrobacter globiformis
Arthrobacter marinus
Arthrobacter paraffineus
Azotobacter - all species in genus

Bacillus - all species in genus except:

B. anthracis
Bacteroides asaccharolytica
Bacteroides gingivalis
Bacteroides intermedia
Bacteroides loeschii
Bacteroides distasonis
Bacteroides fragilis
Bacteroides incomminus
Bacteroides levii
Bacteroides melaninogenica
Bacteroides ovatus
Bacteroides succinogenes
Bacteroides thetaiotaomicron
Bacteroides uniformis
Bacteroides ureolyticus
Bacteroides vulgatus
Beggiatoa alba
Beneckea hyperoptica
Bordetella bronchiseptica
Bordetella parapertussis

SCIENTIFIC NAME

Bordetella pertussis
Borrelia burgdorferi
Branhamella (= *Moraxella*) *catarrhalis*
Bradyrhizobium - all species in genus
Brevibacterium lipolyticum
Burkholderia cepacia
Butyribacterium rettgeri

Campylobacter - all species in genus
Caryophanon latum
Cellulomonas biazotea
Cellulomonas pusilla
Chlamydia - all species in genus except:
 C. psittaci avian strains
Chromatium warmingii
Chromobacterium violaceum
Citrobacter (all species in genus)
Clostridium bifermentans
Clostridium butyricum
Clostridium chauvoei
Clostridium difficile
Clostridium equi
Clostridium felsineum
Clostridium flavum
Clostridium haumanii
Clostridium histolyticum
Clostridium innocuum
Clostridium novyi
Clostridium pasteurianum
Clostridium perfringens
Clostridium ramosum
Clostridium rubrum
Clostridium sordellii
Clostridium sporogenes
Clostridium tertium
Clostridium tetani
Clostridium thermosaccharolyticum
Coccobacillus macrouai
Comamonas testosteroni
Corynebacterium amycolatum
Corynebacterium diphtheriae
Corynebacterium haemolyticum
Corynebacterium hoffmanni
Corynebacterium jeikeium
Corynebacterium pseudodiphthericum
Corynebacterium xerosis
Cunninghamella - all species in genus
Cytophaga fermentans
Cytophaga johnsonae

SCIENTIFIC NAME

Desulfovibrio desulfuricans

Edwardsiella tarda

Eikenella corrodens

Enterobacter - all species in genus

Enterococcus avium

Enterococcus durans

Enterococcus faecalis

Enterococcus faecium

Enterococcus hirae

Erwinia dissolvens

Erysipelothrix - all species in genus

Escherichia coli

Eubacterium lentum

Flavobacterium multivorum

Flavobacterium meningosepticum

Flavobacterium odoratum

Fusobacterium mortiferum

Fusobacterium necrophorum

Fusobacterium nucleatum

Gardnerella vaginalis

Haemophilus ducreyi

Haemophilus influenzae

Haemophilus parahaemolyticus

Haemophilus parainfluenzae

Haemophilus paraphrophilus

Haemophilus parasuis

Haemophilus sommus

Hafnia - all species in genus

Helicobacter - all species in genus

Hydrogenomonas facilis

Hydrogenomonas ruhlandii

Hydrogenophaga flava

Hydrogenophaga palleronii

Hydrogenophaga pseudoflava

Hyphomicrobium neptunium

Jonesia - all species in genus

Kingella kingae

Klebsiella - all species in genus

Kurthia zopfii

Lactobacillus - all species in genus

Lactococcus cremoris

Lactococcus lactis

SCIENTIFIC NAME

Leclercia adecarboxylata
Legionella - all species in genus
Leptospira - all species in genus
Leptotrichia buccalis
Leuconostoc citrovorum
Leuconostoc cremoris
Leuconostoc mesenteroides
Listeria - all species in genus

Methanobacterium omelianskii
Methanomonas methylovora
Micrococcus - all species in genus
Micromonospora chalcea
Micromonospora echinospora
Micromonospora fusca
Micromonospora parva
Micromonospora purpurea
Micromonospora vulgaris
Moraxella catarrhalis
Moraxella ureolytica
Moraxella urethralis
Moraxella osloensi
Morganella morganii
Mycobacterium - all species in genus except:
 M. avium
 M. bovis
 M. tuberculosis
Mycoplasma laidlawii
Myroides odoratus
Myxococcus xanthus

Neisseria cinerea
Neisseria flavascens
Neisseria gonorrhoeae
Neisseria lactamica
Neisseria meningitidis
Neisseria mucosa
Neisseria perflava
Neisseria sicca
Neisseria subflava
Nocardia asteroides
Nocardia brasiliensis
Nocardia coeliaca
Nocardia corallina
Nocardia erythropolis
Nocardia otitidiscaviarum
Nocardia peraffinae
Nocardia rubra
Nocardiopsis dassonvillei

SCIENTIFIC NAME

Nitrobacter - all species in genus
Nitrococcus - all species in genus
Nitrosococcus - all species in genus
Nitrosomonas - all species in genus

Oerskovia xanthineolytica
Oligella ureolytica
Oligella urethralis

Pasteurella aerogenes
Pasteurella haemolytica
Pasteurella multocida
Pediococcus acidilactici
Peptococcus glycinophilus
Peptococcus saccharolyticus
Peptostreptococcus anaerobium
Peptostreptococcus elsdonii
Peptostreptococcus magnus
Peptostreptococcus micros
Photobacterium - all species in genus
Plesiomonas shigelloides
Porphyromonas asaccharolytica
Porphyromonas gingivalis
Porphyromonas levii
Prevotella intermedia
Prevotella loeschii
Prevotella melaninogenica
Propionibacterium acidipropionici
Propionibacterium acnes
Propionibacterium freudenreichii
Propionibacterium jensenii
Propionibacterium pentosaceum
Propionibacterium shermanii
Propionibacterium technicum
Propionibacterium thoenii
Proteus mirabilis
Proteus penneri
Proteus rettgeri
Proteus vulgaris
Providencia alcalifaciens
Providencia rettgeri
Providencia stuartii
Pseudomonas aeruginosa
Pseudomonas alcaligenes
Pseudomonas cepacia
Pseudomonas citronellolis
Pseudomonas delafieldii
Pseudomonas denitrificans
Pseudomonas facilis

SCIENTIFIC NAME

Pseudomonas flava
Pseudomonas fluorescens
Pseudomonas lucifera
Pseudomonas nactus
Pseudomonas nigrifaciens
Pseudomonas oleovorans
Pseudomonas palleronii
Pseudomonas pickettii
Pseudomonas pseudoalcaligenes
Pseudomonas pseudoflava
Pseudomonas putida
Pseudomonas saccharophila
Pseudomonas stutzeri
Pseudomonas testosteroni

Ralstonia pickettii
Rhizobium - all species in genus
Rhodobacter sphaeroides
Rhodococcus - all species in genus
Rhodopseudomonas palustris
Rhodopseudomonas sphaeroides
Rhodospirillum rubrum
Rothia dentocariosa
Ruminococcus albus
Ruminococcus bromii
Ruminococcus flavefaciens
Ruminococcus rumen

Salmonella - all species in genus except:
 S. typhi
Saprospira grandis
Sarcina aurantiaca
Sarcina flava
Sarcina lutea
Sarcina subflava
Sarcina ureae
Sarcina ventriculi
Selenomonas -all species in genus
Serratia - all species in genus
Shewanella putrefaciens
Shigella - all species in genus
Sorangium cellulosum
Sphaerotilus natans
Sphingobacterium multivorum
Sphingobacterium serpens
Spirillum volutans
Spirochaeta cytophaga
Sporocytophaga myxococcoides
Staphylococcus -all species in genus

SCIENTIFIC NAME

Stenotrophomonas maltophilia
Streptococcus - all species in genus
Streptomyces - all species in
Succinimonas - all species in genus
Succinivibrio - all species in genus

Thiobacillus dinitrificans
Thiobacillus thioparus
Treponema zuelzeriae

Ureaplasma urealyticum

Veillonella alcalescens
Veillonella parvula
Vibrio adaptatus
Vibrio alginolyticus
Vibrio alginosus
Vibrio anguillarum
Vibrio cholerae
Vibrio fisheri
Vibrio haloplanktis
Vibrio marinagilis
Vibrio marino vulgaris
Vibrio marinofulvus
Vibrio marinus
Vibrio noctiluca
Vibrio parahemolyticus
Vibrio vulnificus
Vitreoscilla stercoraria

Xanthomonas maltophilia

Yersinia enterocolitica
Yersinia kristensenii

VIRUSES

adenovirus - human, all types

coxsackievirus
cytomegalovirus

SCIENTIFIC NAME

echovirus
enterovirus
Epstein-Barr virus

hepatitis virus - types A,B,C,D,E
herpes simplex virus - types 1 and 2
herpes varicella zoster virus
human immunodeficiency virus - types 1 and 2
human papillomavirus

influenza virus - types A,B,C

measles (rubeola) virus
mumps virus

parainfluenza virus - types 1,2,3,4
poliovirus - all strains except:
 poliovirus wild-type strain

respiratory syncytial virus
rhinovirus
rotavirus
rubivirus (rubella)

vaccinia virus
varicella-zoster virus

BACTERIOPHAGE
(Hosts of Bacteriophage)

Acidovorax facilis
Actinomyces viscosus
Agrobacterium radiobacter
Agrobacterium tumefaciens
Alteromonas espejiana
Alteromonas haloplanktis
Anabaena - all species in genus
Asticcacaulis excentricus
Azotobacter vinelandii

Bacillus brevis
Bacillus cereus
Bacillus firmus
Bacillus licheniformis
Bacillus megaterium
Bacillus mycoides

SCIENTIFIC NAME

Bacillus polymyxa
Bacillus pumilus
Bacillus stearothermophilus
Bacillus subtilis
Bacillus thuringiensis
Bacteroides fragilis
Brochothrix thermosphacta
Brucella abortus
Brucella melitensis

Campylobacter coli
Campylobacter jejuni
Caulobacter bacteroides
Caulobacter crescentus
Caulobacter fusiformis
Clostridium sporogenes
Comamonas acidovorans
Corynebacterium - all species in genus
Cytophaga marinoflava

Enterobacter cloacae
Enterococcus faecalis
Enterococcus faecium
Erwinia amylovora
Erwinia ananas
Escherichia coli

Klebsiella pneumoniae

Lactobacillus - all species in genus
Lactococcus lactis
Listeria monocytogenes

Micrococcus luteus
Mycobacterium - all species in genus

Nocardioides albus
Nostoc - all species in genus

Plectonema boryanum
Propionibacterium acnes
Pseudomonas aeruginosa
Pseudomonas fluorescens
Pseudomonas fragi
Pseudomonas putida
Pseudomonas syringae

Rhizobium leguminosarum

SCIENTIFIC NAME

Rhodospirillum rubrum

Saccharopolyspora rectivirgula

Salmonella choleraesuis

Salmonella typhimurium

Serratia marcescens

Shigella - all species in genus

Staphylococcus aureus

Streptococcus - all species in genus

Streptomyces griseus

Synechococcus - all species in genus

Thermoactinomyces candidus

Vibrio - all species in genus

Xanthomonas campestris

Xanthomonas oryzae

Yersinia pestis

Yersinia pseudotuberculosis

ALGAE

Chaetoceros - all species in genus except:

C. convolutus

C. concavicornis

Characiosiphon - all species in genus

Chilomonas oblonga

Chilomonas paramecium

Chlorella - all species in genus

Cyanophora paradoxis

Derbesia - all species in genus

Dunaliella - all species in genus

Gonium - all species in genus

Isochrysis - all species in genus

Monochrysis - all species in genus

Nannochloropsis - all species in genus

Ochromonas - all species in genus

Palmaria mollis

Pandorina - all species in genus

SCIENTIFIC NAME

Peranema granulifera
Peranema trichophorum
Prototheca - all species in genus

Rhodochorton purpureum

Skeletonema - all species in genus

Tetraselmis - all species in genus
Thalassiosira - all species in genus

Volvox - all species in genus

PROTOZOA

Amoeba proteus
Arcella - all species in genus

Blepharisma - all species in genus

Chaos carolinensis
Chilomastix mesnili
Colpidium - all species in genus

Didinium - all species in genus
Diffugia lobostoma
Dileptus - all species in genus

Endolimax nana
Entamoeba coli
Entamoeba gingivalis
Entamoeba hartmanii
Enteromonas hominis
Euplotes - all species in genus

Iodamoeba buetschlii

Paramecium aurelia
Paramecium bursaria
Paramecium caudatum
Paramecium micronucleatum
Paramecium multimicronucleatum

Retortamonas intestinalis

Spirostomum - all species in genus
Stentor - all species in genus

SCIENTIFIC NAME

Tetrahymena pyriformis

Trichomonas hominis

Trichomonas tenax

Vorticella - all species in genus

III. NEW BUSINESS

- D. Discussion and Action on the Proposed Amendments to HAR Title 13 Chapter 95, **Rules Regulating the Taking and Selling of Certain Marine Resources**, promulgated by DLNR

**PRE-PUBLIC HEARING SMALL BUSINESS IMPACT STATEMENT
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**
(Hawaii Revised Statutes §201M-2)

Date: 5/10/2023

Department or Agency: DLNR - Division of Aquatic Resources

Administrative Rule Title and Chapter: Chapter 13-95, Hawaii Administrative Rules

Chapter Name: Rules Regulating the Taking and Selling of Certain Marine Resources

Contact Person/Title: David Sakoda

E-mail: david.sakoda@hawaii.gov Phone: 808-587-0104

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7?

Yes No

If "Yes," provide details: 1151 Punchbowl St., Ste. 330, Honolulu, HI 96817, 8:00 a.m. - 3:30 p.m.

I. Rule Description:

New Repeal Amendment Compilation

II. Will the proposed rule(s) affect small business?

Yes No

(If "No," no need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit corporation, limited liability company, partnership, limited partnership, sole proprietorship, or other legal entity that: (1) Is domiciled and authorized to do business in Hawaii; (2) Is independently owned and operated; and (3) Employs fewer than one hundred full-time or part-time employees in Hawaii." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance?

Yes No

(If "Yes" no need to submit this form. E.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives. HRS §201M-2(d))

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a))

Yes No

(If "Yes" no need to submit this form.)

* * *



If the proposed rule affects small business and are not exempt as noted above, please provide a reasonable determination of the following:

1. Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected.

Commercial fishers and commercial marine dealers who buy and sell uhu (parrotfish), kala, kole, manini, and pāpaʻi kualoa (Kona crab).

2. In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance.

The proposal establishes commercial uhu and kala fishing permits (\$100.00 each); 25% reduction from the historic reported annual commercial catch of uhu and kala

If the proposed rule imposes a new or increased fee or fine:

- a. Amount of the current fee or fine and the last time it was increased.

N/A

- b. Amount of the proposed fee or fine and the percentage increase.

\$100.00 permit fee (percentage unable to be calculated - no previous fee)

- c. Reason for the new or increased fee or fine.

To offset the administrative costs of the new permits and to deter fishers from obtaining a permit strictly to circumvent the recreational bag limits

- d. Criteria or methodology used to determine the amount of the fee or fine (i.e., Consumer Price Index, Inflation rate, etc.).

Consistency with other license/permit fee schedules.

3. The probable monetary costs and benefits to the agency or other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used.

Around \$5,000.00 yearly from permit fees to be used to administer the permit and to fund monitoring and management of the fisheries to support future management decisions.

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.

The proposed permitting system is, in and of itself, an effort to mitigate the negative economic impacts to commercial uhu and kala fishers who would otherwise be subject to the proposed statewide bag limits of 2 uhu per person per day and 2 kala per person per day. This proposal is a direct result of numerous scoping sessions with small business, commercial uhu and kala fishers.

5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.

Available less restrictive alternatives:

- 1) Complete carve out (no regulations) for commercial uhu and kala fishers (not practical - unfair to recreational and subsistence fishers)
- 2) No separate permitting system for commercial uhu and kala fishers; Apply carve out for all Commercial Marine License holders (not practical - too difficult to enforce)
- 3) No Commercial Uhu/Kala Annual Catch Limit (not practical - goal to reduce pressure)

6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.

See answer to Question #4. The groups that report the highest amount of commercial catch of uhu and kala (also known as highliners) are small business, local families.

7. How the agency involved small business in the development of the proposed rules.

See answer to Question #4. The Division of Aquatic Resources (DAR) has engaged with the the uhu and kala highliners from the beginning of the development of this proposal and continues to notify them throughout every step of this process. Most recently, DAR, under the direction of the Board of Land and Natural Resources and in consultation with the uhu and kala highliners, has amended the proposal to include the specific accommodations for commercial fishers that are included in this proposal.

- a. If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.

Yes. See answer to Questions #4 and #7.

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

The proposed rules are specifically tailored to the needs of the commercial uhu and kala fishers; the proposed rules are less stringent than the proposed statewide bag limits for recreational and subsistence take of uhu and kala.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.
 - 1) Ensure the continuation of the commercial uhu and kala fishery
 - 2) Reduce overall fishing pressure on important herbivore species

- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.
N/A

- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.
N/A

- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.
N/A

- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.
N/A

* * *

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594 / Email: DBEDT.sbrrb.info@hawaii.gov

This Statement may be found on the SBRRB Website at: <http://dbedt.hawaii.gov/sbrrb/resources/small-business-impact-statements>

Amendment and Compilation of Chapter 13-95
Hawaii Administrative Rules

(date of adoption)

1. Chapter 13-95, Hawaii Administrative Rules, entitled "Rules Regulating the Taking and Selling of Certain Marine Resources", is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 13

DEPARTMENT OF LAND AND NATURAL RESOURCES

SUBTITLE 4 FISHERIES

PART V PROTECTED MARINE FISHERIES RESOURCES

CHAPTER 95

RULES REGULATING THE TAKING AND SELLING
OF CERTAIN MARINE RESOURCES

§13-95-1	Definitions
§13-95-1.1	Licenses, permits, and other exemptions
§13-95-2	Penalty
§13-95-3	Severability
§13-95-4	Āholehole
§13-95-5	Manini

§13-95-6	Moano
§13-95-7	Kūmū
§13-95-8	`Ama`ama (striped mullet)
§13-95-9	Awa
§13-95-10	`Ō`io
§13-95-11	Kala
§13-95-12	Kala `ōpelu
§13-95-13	`Ōpakapaka
§13-95-14	`Ula`ula koa`e (onaga)
§13-95-15	Uku
§13-95-16	Uhu (parrotfish)
§13-95-17	`Ahi
§13-95-18	`Ōpelu
§13-95-19	Akule
§13-95-20	`Iao
§13-95-21	Nehu
§13-95-22	Ulua
§13-95-23	Moi
§13-95-24	Weke `ā
§13-95-25	Kole
§§13-95-26 to 49	(Reserved)
§13-95-50	Pāpa`i kūhonu (white crab)
§13-95-51	Pāpa`i kualoa (Kona crab)
§13-95-52	Samoan crab
§13-95-53	Ula (spiny lobster)
§13-95-54	Ula pāpapa (slipper lobster)
§13-95-55	He`e (tako)
§§13-95-56 to 69	(Reserved)
§13-95-70	Stony corals
§13-95-71	Live rocks

§13-95-1 Definitions. As used in this chapter, unless otherwise provided:

"`Ahi" means any fish known as *Thunnus albacares* or *Thunnus obesus* or any recognized synonym. `Ahi refers to both yellowfin tuna (*T. albacares*) and bigeye tuna (*T. obesus*).

~~["Āholehole"]~~ "Āholehole" means any fish known as *Kuhlia xenura* or *Kuhlia sandvicensis* or any recognized synonym. Āholehole are also known as āhole, Hawaiian

flagtail, reticulated flagtail, or zebra-head flagtail.

"Akule" means any fish identified as *Selar crumenophthalmus* or [~~ether~~] any recognized synonym. [~~This fish is~~] Akule are also known as [pa'a'a, halalu, hahalalu, and] pā'ā'ā, halalū, hahalalū, goggle-eyed scad, or big-eyed scad.

"'Ama'ama" means any fish known as *Mugil cephalus* or any recognized synonym between eight and twelve inches in length. Individuals of this species at other life stages are known as pua, kahaha, or 'anae. All life stages of this species are generally known as striped mullet.

"'Aanae" means any fish known as *Mugil cephalus* or any recognized synonym greater than twelve inches in length. Individuals of this species at other life stages are known as pua, kahaha, or 'ama'ama. All life stages of this species are generally known as striped mullet.

"Annual catch limit" or "ACL" is the maximum commercial harvest in a given fishing year established for any marine fishery subject to closure. The catch is measured in whole wet weight through cumulative reported landings by commercial marine licensees.

"Aquarium fish permit" means a permit issued by the board pursuant to section 188-31, HRS, for the use of fine mesh nets and traps to take marine fish, freshwater nongame fish, or other aquatic life for aquarium purposes.

"Awa" means any fish known as *Chanos chanos* or any recognized synonym. Awa are also known as milkfish.

"Board" means the board of land and natural resources.

"Break" means to hit with, or to apply sufficient force to reduce to smaller pieces or to crack without actually separating into pieces.

"Carapace length" means the straight line measurement from the tip of the rostrum to the middle of the trailing edge of the body or carapace, not including the abdomen or tail.

"Commercial marine licensee" means a person who has been issued a commercial marine license pursuant to section 13-74-20 and section 189-2, HRS.

"Damage" means to scrape, smother, poison, or otherwise cause any physical or physiological harm to the living portion of a stony coral or live rock.

"Day" means a twenty-four hour period.

~~["He'e"]~~ "He'e" means any mollusk known as *Octopus cyanea*, *Octopus ornatus*, or any recognized synonym. He'e are also known as octopus or tako.

"Initial-phase uhu" means any uhu characterized by a dull red, brown, or gray body coloration and the absence of bright green or blue markings.

"Hook-and-line" means a fishing line to which one or more hooks or other tackle are attached. A hook-and-line may include a fishing rod or reel or both to cast and retrieve the line.

"'Iao" means any fish known as *Atherinomorus insularum* or any recognized synonym. 'Iao are also known as Hawaiian silverside or Hawaiian Islands silverside.

"Kahaha" means any fish known as *Mugil cephalus* or any recognized synonym between four and eight inches in length. Kahaha are also known as pahaha. Individuals of this species at other life stages are known as pua, 'ama'ama, or 'anae. All life stages of this species are generally known as striped mullet.

"Kala" means any fish known as *Naso unicornis*, *Naso brevirostris*, *Naso annulatus*, or any recognized synonym. Kala are also known as bluespine unicornfish, short-nosed unicornfish, spotted unicornfish, or whitemargin unicornfish.

"Kala 'ōpelu" means any fish known as *Naso hexacanthus* or any recognized synonym. Kala 'ōpelu are also known as 'ōpelu kala or sleek unicornfish.

~~["Kona crab" means any crab known as *Ranina ranina* or any recognized synonym.]~~

"Kole" means any fish known as *Ctenochaetus strigosus* or any recognized synonym. Kole are also known as kole tang, spotted surgeonfish, goldring surgeonfish, or yellow-eyed tang.

[~~"Kumu"~~] "Kūmū" means any fish known as *Parupeneus porphyreus* or any recognized synonym. Kūmū are also known as whitesaddle goatfish.

"Length" means the straight line measurement from the tip of the snout to the middle of the trailing edge of the tail.

"Live rock" means any natural hard substrate to which marine life is visibly attached or affixed.

"Manini" means any fish known as *Acanthurus triostegus sandvicensis* or any recognized synonym. Manini are also known as convict tang or convict surgeonfish.

"Mitigation" means activities carried out in accordance with this chapter in order to avoid, minimize, restore, or compensate for losses of certain marine resources due to authorized activities.

"Moano" means any fish known as *Parupeneus multifaciatus* or any recognized synonym. Moano are also known as banded goatfish, five-barred goatfish, manybar goatfish, or multibarred goatfish.

"Moi" means any fish known as *Polydactylus sexfilis* or any recognized synonym. Moi are also known as six-fingered threadfin or yellowthread threadfin.

[~~"Mullet" means any fish known as *Mugil cephalus* or any recognized synonym.~~]

"Nehu" means any fish known as *Encrasicholina purpurea* or any recognized synonym. Nehu are also known as Hawaiian anchovy.

"Net" means any of various fishing devices of mesh material made into various shapes, such as but not limited to, a bag, sack, pouch, or curtain, used to entangle, surround, or concentrate aquatic life.

[~~"Ōio"~~] "Ō'io" means any fish known as *Albula glossodonta* or *Albula virgata* or any recognized synonym. Ō'io are also known as roundjaw bonefish, shortjaw bonefish, Indo-Pacific bonefish, sharpjaw bonefish, or smallmouth bonefish.

[~~"Opelu kala" means any fish known as *Naso hexacanthus* or any recognized synonym.~~]

"Ōpakapaka" means any fish known as *Pristipomoides filamentosus* or any recognized synonym.

'Ōpakapaka are also known as Hawaiian pink snapper, pink snapper, kinme himedai, or ohimedai.

"'Ōpelu" means any fish of the genus *Decapterus*. 'Ōpelu are also known as mackerel scad.

"Pāpa`i kualoa" means any crab known as *Ranina ranina* or any recognized synonym. Pāpa`i kualoa are also known as pāpa`i kua loa, Kona crab, frog crab, or spanner crab.

"Pāpa`i kūhonu" means any crab known as *Portunus sanguinolentus* or *Portunus hawaiiensis* or any recognized synonym. Pāpa`i kūhonu are also known as pāpa`i kuahonu, kūhonu, kuahonu, blood-spotted swimming crab, or white crab.

"Pua" means any fish known as *Mugil cephalus* or any recognized synonym between zero and four inches in length. Pua are also known as pua `ama, pua `ama`ama, pua po`olā, or pua `o`olā. Individuals of this species at other life stages are known as kahaha, `ama`ama, or `anae. All life stages of this species are generally known as striped mullet.

"Renewable energy projects" means projects developed by renewable energy producers, as the term is defined in section 171-95, Hawaii Revised Statutes, that reduce the consumption of non-renewable energy resources or produce renewable energy.

"Samoan crab" means any crab known as *Scylla serrata* or any recognized synonym. The Samoan crab is a type of swimming crab and is also known as mud crab or mangrove crab.

"Sell" means to solicit and receive an order for; to have, or keep, or offer, or expose for sale; to deliver for value or in any other way than purely gratuitously; to peddle; to keep with intent to sell; and to traffic in.

"Spear" means any device or implement that is designed or used for impaling aquatic life. Spears may include but are not limited to spear gun shafts, arbaletes, arrows, bolts, Hawaiian slings, tridents, or three-prong spears.

~~"Speared" means [to capture aquatic life by stabbing with a spear or other such pointed device. The presence of any puncture wound on the external~~

~~surfaces of the aquatic life, which are fresh and does not show signs of healing, shall be evidence that the aquatic life was speared.]~~ pierced, impaled, penetrated, stuck, or run through by a sharp, pointed implement.

~~["Slipper lobster" means any crustacean of the species *Scyllarides squammosus* or *S. haanii*, or recognized synonyms. These animals are also known as rock lobster, mole lobster, shovel-nosed lobster, or ula papapa.~~

~~"Spiny lobster" means any crustacean of the genus *Panulirus*. These animals are also known as lobster, Hawaiian spiny lobster, red lobster, green lobster, or ula.]~~

"Stony coral" means any invertebrate species belonging to the Order Scleractinia, characterized by having a hard, calcareous skeleton, that are native to the Hawaiian Islands.

"Striped mullet" means any fish known as *Mugil cephalus* or any recognized synonym. The various life stages of striped mullet are known as pua, kahaha, 'ama'ama, or 'anae.

"Take" means to fish for, catch, capture, confine, or harvest, or to attempt to fish for, catch, capture, confine, or harvest, aquatic life. The use of any gear, equipment, tool, or any means to fish for, catch, capture, confine, or harvest, or to attempt to fish for, catch, capture, confine, or harvest, aquatic life by any person who is in the water, or in a vessel on the water, or on or about the shore where aquatic life can be fished for, caught, captured, confined, or harvested, shall be construed as taking.

"Terminal-phase uhu" means any uhu characterized by the presence of bright green or blue markings or a predominantly green or blue body coloration, often with bright pink, orange, or yellow patches.

~~"Uhu" means any fish [known as *Scarus dubius*, *Scarus psittacus*, *Scarus rubroviolaceus*, *Chlorurus sordidus*, *Chlorurus perspicillatus*, or any recognized synonym.]~~ belonging to the family Scaridae or any

recognized synonyms. Uhu is a general term for parrotfish.

"Uhu 'ahu'ula" means any fish known as *Chlorurus perspicillatus* or any recognized synonym that has not reached its terminal phase. Uhu 'ahu'ula have a grayish brown body with reddish fins and a broad white band at the base of the tail. The terminal phase of these fish are known as uhu uliuli. Both uhu 'ahu'ula and uhu uliuli are known as spectacled parrotfish or fantail uhu.

"Uhu 'ele'ele" means any fish known as *Scarus rubroviolaceus* or any recognized synonym that has reached its terminal phase, indicated by a change in coloration from a predominantly brownish-red or yellowish-gray body with reddish fins, to a predominantly green or blue-green body color with a green beak. Both uhu 'ele'ele and uhu pālukaluka are known as redlip or ember parrotfish or whiptail uhu.

"Uhu pālukaluka" means any fish known as *Scarus rubroviolaceus* or any recognized synonym that has not reached its terminal phase. Uhu pālukaluka have a predominantly brownish-red or yellowish gray body with reddish fins. The terminal phase of these fish are known as uhu 'ele'ele. Both uhu pālukaluka and uhu 'ele'ele are known as redlip or ember parrotfish or whiptail uhu.

"Uhu uliuli" means any fish known as *Chlorurus perspicillatus* or any recognized synonym that has reached its terminal phase, indicated by a change in coloration from a grayish brown body with reddish fins and a broad white band at the base of the tail, to a blue-green body with a dark band across the top of the snout and the lack of a white tail band. Both uhu uliuli and uhu 'ahu'ula are known as spectacled parrotfish or fantail uhu.

"Uku" means any fish known as *Aprion virescens* or any recognized synonym. Uku are also known as uku palu, green jobfish, gray jobfish, blue-green snapper, Hawaiian blue-green snapper, gray snapper, slender snapper, or aochibiki.

"Ula" means any spiny lobster of the genus *Panulirus*. Ula are also known as lobster, Hawaiian

spiny lobster, spiny lobster, red lobster, or green lobster.

"Ula pāpapa" means any crustacean of the species *Scyllarides squammosus* or *Scyllarides haanii*, or any recognized synonym. Ula pāpapa are also known as ula 'āpapapa, slipper lobster, ridgeback slipper lobster, or shovel-nosed lobster.

"'Ula'ula koa'e" means any fish known as *Etelis coruscans* or any recognized synonym. 'Ula'ula koa'e are also known as koa'e, onaga, long-tail red snapper, ruby snapper, scarlet snapper, or hamadai.

"Ulua" means any fish known as *Caranx ignobilis*, *Caranx lugubris*, *Caranx melampygus*, *Caranx sexfasciatus*, *Carangoides equula*, *Carangoides ferdau*, *Carangoides orthogrammus*, or any recognized synonym. The young of these species are also known as [~~pāpio-~~] pāpio.

["Weke"] "Weke 'ā" means any fish known as *Mulloidichthys flavolineatus* or any recognized synonym. [~~These fish~~] Weke 'ā are also known as [~~goatfish, yellowstripe goatfish, weke a, and the~~] goatfish or yellowstripe goatfish. The young of this fish [~~is~~] are known as [~~oama-~~] 'oama. [Eff 12/03/98; am 1/11/02; am 12/09/02; am 12/19/02; am 5/01/14; am 10/19/18; am and comp 1/31/21; am and comp

] (Auth: HRS §§187A-3.5, 187A-5, 190-3) (Imp: HRS §§187A-3.5, 187A-5, 190-3)

§13-95-1.1 Licenses, permits, and other exemptions. Notwithstanding the provisions of this chapter, the department may issue the following licenses and permits to exempt persons from the provisions of this chapter:

- (1) Licenses issued pursuant to sections 187A-3.5, 188-44, 188-57, or 189-6, HRS;
- (2) Permits issued pursuant to sections 187A-6, 188-23, 188-37, 188-68, or 190-4, HRS; or
- (3) As may be otherwise provided by law. [Eff 12/19/02; am 5/01/14; comp 1/31/21; comp

] (Auth: HRS §§187A-3.5, 187A-6, 188-44, 188-45, 188-57, 188-68, 190-3) (Imp: HRS §§187A-3.5, 187A-6, 188-23, 188-37, 188-44, 188-45, 188-57, 188-68, 190-4)

§13-95-2 Penalty. (a) A person violating any section of this chapter may be subject to any applicable criminal or administrative penalties or both. Unless otherwise expressly provided, the remedies or penalties provided by this chapter are cumulative to each other and to the remedies or penalties available under all other laws of this State.

(b) For the purpose of calculating the administrative penalties for violations of this chapter, if a fine per specimen may be applicable, fines per specimen may be imposed on the following basis:

- (1) For finfish, each individual;
- (2) For invertebrates, not including stony corals or live rock, each individual;
- (3) For solitary (having a single polyp) stony corals, each individual;
- (4) For colonial stony corals:
 - (A) Each damaged head or colony less than one square meter in surface area; or
 - (B) For a colony greater than one square meter in surface area, each square meter of colony surface area and any fraction remaining constituting an additional specimen;
- (5) For live rocks, each individual; but if the violation involves greater than one square meter of bottom area, on the basis of each square meter of bottom area. [Eff 12/03/98; am 5/01/14; comp 1/31/21; comp

] (Auth: HRS §§187A-5, 190-3) (Imp: HRS §§183C-7, 187A-5, 187A-12.5, 187A-13, 188-53, 188-70, 189-4, 190-5)

§13-95-3 Severability. If any provision of this chapter, or the application thereof to any person or circumstance is held invalid, the invalidity does not affect other provisions or applications of the chapter which can be given effect without the invalid provision or application, and to this end the provisions of this chapter are severable. [Eff 12/3/98; comp 1/31/21; comp] (Auth: HRS §187A-5) (Imp: HRS §§187A-5, 1-23)

§13-95-4 [~~Aholehole.~~ Āholehole. It [~~shall be~~] is unlawful for any person to take, possess, or sell any [~~aholehole~~] āholehole less than five inches in length. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-5 Manini. It [~~shall be~~] is unlawful for any person to take, possess, or sell any manini less than [~~five~~] six inches in length. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-6 Moano. It [~~shall be~~] is unlawful for any person to take, possess, or sell any moano less than seven inches in length. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-7 [~~Kumu.~~ Kūmū. It [~~shall be~~] is unlawful for any person to take, possess, or sell any

[~~kumu~~] kūmū less than ten inches in length. [Eff
12/03/98; am 12/19/02; comp 1/31/21; am and comp
] (Auth: HRS §187A-5) (Imp: HRS
§187A-5)

§13-95-8 [~~Mullet.~~] 'Ama`ama (striped mullet).

(a) It [~~shall be~~] is unlawful for any person to take, possess, or sell any [~~mullet~~] pua, kahaha, or `ama`ama less than eleven inches in [~~length.~~] length except as provided in subsection (b) of this section.

(b) It is unlawful for any person to wilfully fish for, or attempt to take by any means whatsoever, from any of the waters within the jurisdiction of the State, or to sell, or have in possession any [~~mullet~~] pua, kahaha, `ama`ama, or `anae during the months of December, January, February, and March; provided that any owner or operator of a fish pond may lawfully catch [~~the young mullet known as~~] pua during the closed season, for the purpose of stocking the owner's or operator's pond; and provided further that any owner or operator of a fish pond or any commercial marine dealer may lawfully sell [~~pond-raised mullet~~] pond-raised pua, kahaha, `ama`ama, or `anae during the closed season after first procuring a license to do so pursuant to sections 13-74-40 or 13-74-43. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp
] (Auth: HRS §187A-5) (Imp: HRS
§187A-5)

§13-95-9 Awa. It [~~shall be~~] is unlawful for any person to take, possess, or sell any awa less than nine inches in length. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp
] (Auth: HRS
§187A-5) (Imp: HRS §187A-5)

§13-95-10 [~~010.~~] 'Ō'io. It [~~shall be~~] is unlawful for any person to take, possess, or sell any [~~010.~~] 'Ō'io less than fourteen inches in length. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-11 Kala. (a) It [~~shall be~~] is unlawful for any person to take, possess, or sell any kala less than fourteen inches in length.

(b) Subject to subsections (e) and (g), it is unlawful for any person to take more than two kala per day or possess more than two kala at any one time.

(c) It is unlawful for any person to take kala for commercial purposes without a valid commercial kala fishing permit.

(d) The department shall, upon receipt of a valid application and appropriate fee payment, issue a commercial kala fishing permit to any individual who:

- (1) Possesses a valid commercial marine license;
- (2) Provides proof of identity; and
- (3) Has caught and sold at least 100 pounds of kala during the prior kala fishing season, if the individual held a commercial kala fishing permit for the prior kala fishing season.

The fee for the issuance or renewal of a commercial kala fishing permit shall be \$100. A commercial kala fishing permit shall be valid for the duration of the kala fishing season, which extends from August 1 of a given year through March 31 of the following calendar year.

(e) A commercial kala fishing permittee participating in a commercial kala fishing trip may take up to fifty kala per day, and possess up to fifty kala at any one time, provided that:

- (1) Commercial harvest or sale of kala shall be prohibited from April through July; and

(2) Commercial harvest or sale of kala shall be prohibited when the commercial kala fishing season is closed pursuant to subsection (h).

(f) It is unlawful for any commercial marine dealer to purchase, possess, or sell kala unless the commercial marine dealer has registered with the department as a commercial kala dealer.

(g) A registered commercial kala dealer may possess and sell more than two kala if in compliance with section 189-11, HRS, provided that:

(1) No kala may be purchased, possessed, or sold when the commercial kala fishing season is closed pursuant to subsection (h), provided that kala legally obtained prior to the closure may be possessed and sold after the closure; and

(2) Paragraph (1) notwithstanding, no kala may be purchased, possessed, or sold from April through July.

(h) There is established an annual catch limit (ACL) of 10,000 pounds for the commercial kala fishery. Commercial kala catch shall be tallied beginning in August of each year. When the ACL is reached, the department shall notify commercial kala fishing permittees and registered commercial kala dealers that the commercial kala fishing season will close. Notice shall be made in writing by mail or email to the address on file with the department no less than three days prior to the closure of the season. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp] (Auth: HRS §§187A-5, 190-3) (Imp: HRS §§187A-5, 188-53, 190-4)

§13-95-12 [~~Opelu kala.~~] **Kala 'ōpelu.** It [~~shall be~~] is unlawful for any person to take, possess, or sell any [~~opelu kala~~] kala 'ōpelu less than sixteen inches in length. [Eff 12/03/98; am 12/19/02; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-13 [~~Opakapaka.~~] 'Ōpakapaka. (a) It [~~shall be~~] is unlawful for any person to possess with the intent to sell, or offer for sale, any [~~opakapaka~~] 'ōpakapaka less than one pound in weight.

(b) It [~~shall be~~] is unlawful for any person to take with spear or possess any speared [~~opakapaka~~] 'ōpakapaka less than one pound in weight. [Eff 12/3/98; comp 1/31/21; am and comp]
(Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-14 [~~Onaga.~~] 'Ula'ula koa'e (onaga). (a) It [~~shall be~~] is unlawful for any person to possess with the intent to sell, or offer for sale, any [~~onaga~~] 'ula'ula koa'e less than one pound in weight.

(b) It [~~shall be~~] is unlawful for any person to take with spear or possess any speared [~~onaga~~] 'ula'ula koa'e less than one pound in weight. [Eff 12/3/98; comp 1/31/21; am and comp]
(Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-15 **Uku.** (a) It [~~shall be~~] is unlawful for any person to possess with the intent to sell, or offer for sale, any uku less than one pound in weight.

(b) It [~~shall be~~] is unlawful for any person to take with spear or possess any speared uku less than one pound in weight. [Eff: 12/3/98; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-16 [~~Uhu.~~] Uhu (parrotfish). [~~It shall be unlawful for any person to take, possess, or sell any uhu less than twelve inches in length.~~] (a) It is unlawful for any person to take, possess, or sell any uhu 'ele'ele or uhu uliuli at any time.

(b) It is unlawful for any person to take, possess, or sell any uhu pālukaluka or any uhu 'ahu'ula less than fourteen inches in length.

(c) Any other department size restriction notwithstanding, subject to subsections (a) and (b), it is unlawful for any person to take, possess, or sell any other uhu less than ten inches in length.

(d) Subject to subsections (g) and (i), it is unlawful for any person to take more than two uhu of any variety per day or possess more than two uhu of any variety at any one time.

(e) It is unlawful for any person to take uhu for commercial purposes without a valid commercial uhu fishing permit.

(f) The department shall, upon receipt of a valid application and appropriate fee payment, issue a commercial uhu fishing permit to any individual who:

- (1) Holds a valid commercial marine license;
- (2) Provides proof of identity; and
- (3) Has caught and sold at least 340 pounds of uhu during the prior uhu fishing season, if the individual held a commercial uhu fishing permit for the prior uhu fishing season.

The fee for the issuance or renewal of a commercial uhu fishing permit shall be \$100. A commercial uhu fishing permit shall be valid for the duration of the uhu fishing season, which extends from June 1 of a given year through January 31 of the following calendar year.

(g) A commercial uhu fishing permittee participating in a commercial uhu fishing trip may take up to thirty uhu pālukaluka per day, and possess up to thirty uhu pālukaluka at any one time, provided that:

- (1) Only uhu pālukaluka under twenty inches in length may be taken or possessed on a commercial fishing trip;
- (2) No other species of uhu may be taken or possessed on a commercial fishing trip;
- (3) Commercial harvest or sale of uhu shall be prohibited from February through May; and

(4) Commercial harvest or sale of uhu shall be prohibited when the commercial uhu fishing season is closed pursuant to subsection (j).

(h) It is unlawful for any commercial marine dealer to purchase, possess, or sell uhu unless the commercial marine dealer has registered with the department as a commercial uhu dealer.

(i) A registered commercial uhu dealer may purchase, possess, and sell more than two uhu if in compliance with section 189-11, HRS, provided that:

(1) Only uhu pālukaluka less than twenty inches may be purchased, possessed, or sold;

(2) No other species of uhu may be purchased, possessed, or sold;

(3) No uhu may be purchased, possessed, or sold when the commercial uhu fishing season is closed pursuant to subsection (j), provided that uhu legally obtained prior to the closure may be possessed and sold after the closure; and

(4) Paragraph (3) notwithstanding, no uhu may be purchased, possessed, or sold from February through May.

(j) There is established an annual catch limit (ACL) of 34,000 pounds for the commercial uhu fishery. Commercial uhu catch shall be tallied beginning in June of each year. When the ACL is reached, the department shall notify commercial uhu fishing permittees and registered commercial uhu dealers that the commercial uhu fishing season will close. Notice shall be made in writing by mail or email to the address on file with the department no less than three days prior to the closure of the season. [Eff

12/03/98; am 12/19/02; comp 1/31/21; am and comp

] (Auth: HRS §§187A-5, 190-3) (Imp: HRS §§187A-5, 188-53, 190-4)

§13-95-17 [~~Ahi.~~] 'Ahi. (a) It [~~shall be~~] is unlawful for any person to possess with the intent to

sell, or offer for sale, any [~~ahi~~] 'ahi less than three pounds in weight.

(b) It [~~shall be~~] is unlawful for any person to take with spear or possess any speared [~~ahi~~] 'ahi less than three pounds in weight. [Eff: 12/3/98; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-18 [~~Opelu.~~] 'Ōpelu. It [~~shall be~~] is unlawful for any person at any time, to fish for or take, or be engaged in fishing or taking [~~opelu~~] 'ōpelu with fish or [~~animal bait~~] animal bait, also known as "chop-chop", within the waters off the coast of South Kona, [~~island of Hawaii,~~] Hawai'i Island, between the [~~Kiilae-Keokea~~] Ki'ilae-Keokea boundary and the [~~Kapua-Kaulanamauna~~] Kapu'a-Kaulanamauna boundary, except with [~~hook and line.~~] hook-and-line. [Eff 12/3/98; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-19 Akule. (a) It [~~shall be~~] is unlawful for any person to take any akule measuring less than eight and one-half inches in length, with a net during the months of July, August, September, and October.

(b) It is unlawful for any person, other than marine seafood dealers, to possess or sell more than two hundred pounds of akule measuring less than eight and one-half inches in length per day during July, August, September, and October; except as may be otherwise provided by law. [Eff 12/03/98; am 1/11/02; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-20 [~~Iao.~~] 'Iao. (a) It [~~shall be~~] is unlawful for any person at any time to sell, offer for

sale, or trade, any dried or cured [~~iao~~] 'iao taken from the waters within the jurisdiction of the State.

(b) It is unlawful for any person to fish for, catch, or take in or from any of the waters within the jurisdiction of the State any [~~iao~~] 'iao; provided that the department may issue licenses pursuant to section 13-74-22, to take [~~iao~~] 'iao for use as bait only. [Eff: 12/3/98; comp 1/31/21; am and comp

] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-21 Nehu. (a) It [~~shall be~~] is unlawful for any person at any time to sell, offer for sale, or trade, any dried or cured nehu taken from the waters within the jurisdiction of the State.

(b) It is unlawful for any person to fish for, catch, or take in or from any of the waters within the jurisdiction of the State any nehu; provided that the department may issue licenses pursuant to section 13-74-22, to take nehu for use as bait only and as [~~maybe~~] may be otherwise allowed under chapter 13-90. [Eff 12/3/98; comp 1/31/21; am and comp

] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-22 Ulua. (a) It is unlawful for any person to take or possess any ulua less than ten inches in length.

(b) It is unlawful for any person to sell any ulua less than sixteen inches in length.

(c) It is unlawful for any person to take or possess more than twenty ulua measuring more than ten inches in length per day; provided that a commercial marine licensee may take, possess, and sell more than twenty such ulua; and further provided that a commercial marine dealer may possess and sell more than twenty such ulua with receipts issued for the

purchase pursuant to section 189-11, Hawaii Revised Statutes. [Eff 12/19/02; comp 1/31/21; comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

Historical Note: Section 13-95-22 is based substantially upon Chapter 87 of Title 13. [Eff 5/26/81; am 1/25/82; R 12/19/02] Chapter 87 of Title 13 was based substantially upon Regulation 19 of the Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii. [Eff 3/28/58; am 10/6/58; R 5/26/81]

§13-95-23 Moi. (a) It is unlawful for any person to take, possess, or sell any moi less than eleven inches in length.

(b) It is unlawful for any person to take, possess, or sell more than fifteen moi per day during September through May; provided that a commercial marine dealer may possess and sell more than fifteen moi with receipts issued for the purchase pursuant to section 189-11, Hawaii Revised Statutes.

(c) It is unlawful for any person to take, possess, or sell any moi during June, July, and August. [Eff 12/19/02; comp 1/31/21; comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

Historical Note: Section 13-95-23 is based substantially upon Chapter 88 of Title 13. [Eff 5/26/81; am and comp 12/20/86; R 12/19/02] Chapter 88 of Title 13 was based substantially upon Regulation 20 [Eff: 3/20/58; am 10/6/58; am 7/9/59; am 5/4/68; R 5/26/81] and Regulation 21 [Eff: 3/28/58; am 10/6/58; am 7/9/59; R 5/26/81] of the Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii.

§13-95-24 [~~Weke-~~] **Weke 'ā.** (a) It is unlawful for any person to take or possess more than fifty [~~weke~~] weke 'ā less than seven inches in length per day.

(b) It is unlawful for any person to sell any [~~weke~~] weke 'ā less than seven inches in length. [Eff 12/19/02; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

Historical Note: Section 13-95-24 is based substantially upon Chapter 88 of Title 13. [Eff 5/26/81; am and comp 12/20/86; R 12/19/02] Chapter 88 of Title 13 was based substantially upon Regulation 20 [Eff: 3/20/58; am 10/6/58; am 7/9/59; am 5/4/68; R 5/26/81] and Regulation 21 [Eff: 3/28/58; am 10/6/58; am 7/9/59; R 5/26/81] of the Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii.

§13-95-25 **Kole.** It is unlawful to take, possess, or sell any kole less than five inches in length. [Eff and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§§13-95-26 to 13-95-49 (Reserved)

§13-95-50 [~~Kuhonu crab-~~] **Pāpa'i kūhonu (white crab).** (a) It [~~shall be~~] is unlawful for any person to possess with the intent to sell, or offer for sale, any [~~kuhonu crab~~] pāpa'i kūhonu less than four inches in length or in width across or along its back.

(b) It is unlawful for any person to [~~catch or take from any bays, harbors, or other waters of the State, or to expose or offer for sale, or to hold in possession with the intent of exposing or offering for~~]

~~sale, or to kill,]~~ take, possess, or sell any [~~kuhonu crab~~] pāpa`i kūhonu [~~while~~] with eggs. Any [~~kuhonu crab~~] pāpa`i kūhonu with eggs caught must immediately be returned to the waters from which the crab was taken. The possession of any [~~kuhonu crab,~~] pāpa`i kūhonu, showing indications of [~~the~~] its eggs having been scraped or removed [~~therefrom, shall be~~] is prima facie evidence of [~~the~~] a violation of this section.

(c) [~~No person shall~~] It is unlawful for any person to pursue, take, or kill any [~~kuhonu crab~~] pāpa`i kūhonu in the State with a spear.

(d) [~~No person shall~~] It is unlawful for any person to offer for sale any speared [~~kuhonu crab.~~] pāpa`i kūhonu. [Eff 12/3/98; comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

§13-95-51 [~~Kona crab.~~] Pāpa`i kualoa (Kona crab).

(a) It is unlawful for any person to take, possess, or sell any [~~Kona crab~~] pāpa`i kualoa less than four inches in carapace length.

(b) It is unlawful for any person to take, possess, or sell any [~~Kona crab~~] pāpa`i kualoa taken from the waters within the jurisdiction of the State [~~during the months of May, June, July, and August.~~] from May through September.

(c) The possession of any [~~Kona crab~~] pāpa`i kualoa from May through September by any person [~~during the months of May, June, July, and August shall be~~] is prima facie evidence that the person is guilty of a violation of this section; provided that any commercial marine dealer may sell, or any hotel, restaurant, or other public eating house may serve [~~Kona crab~~] pāpa`i kualoa lawfully caught during the open season by first procuring a license to do so pursuant to section 13-74-41.

(d) It is unlawful for any person to take, possess, or sell any [~~Kona crab~~] pāpa`i kualoa with eggs. Any [~~Kona crab~~] pāpa`i kualoa with eggs caught must immediately be returned to the waters from which

the crab was taken. The possession of any [~~Kona crab,~~] pāpa`i kualoa showing indications of [~~the~~] its eggs having been scraped or removed [~~therefrom, shall be~~] is prima facie evidence of [~~the~~] a violation of this section.

(e) It is unlawful for any person to pursue, take, or kill any [~~Kona crab~~] pāpa`i kualoa in the State with a spear.

(f) It is unlawful for any person to possess or sell any speared [~~Kona crab.~~] pāpa`i kualoa.

~~[(g) It is unlawful for any person to take or kill any female Kona crab.]~~ [Eff 12/03/98; am 12/19/02; am and comp 1/31/21; am and comp

] (Auth: HRS §187A-5) (Imp: HRS §§187A-5, 188-57)

§13-95-52 Samoan crab. (a) It is unlawful for any person to take, possess, or sell any Samoan crab less than six inches in width measured across the carapace or back.

(b) It is unlawful for any person to take, kill, possess, or sell any Samoan crab with eggs. Any Samoan crab with eggs caught must immediately be returned to the waters from which the Samoan crab was taken. The possession of any Samoan crab, showing indications of [~~the~~] its eggs having been scraped or removed [~~therefrom, shall be~~] is prima facie evidence of [~~the~~] a violation of this section.

(c) It is unlawful for any person to pursue, take, or kill any Samoan crab in the State with a spear.

(d) It is unlawful for any person to possess or sell any speared Samoan crab.

(e) It is unlawful for any person to take or kill any female Samoan crab. [Eff 12/3/98; am and comp 1/31/21; am and comp] (Auth: HRS §187A-5) (Imp: HRS §187A-5)

Historical note: Subsection 13-95-52(a) is based substantially upon chapter 84 of title 13. [Eff

5/26/81; am 1/25/82; R 1/31/21] Chapter 84 of Title 13 was based substantially upon Regulation 14 of the Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii. [Eff 11/25/41 (Governor's approval date); am 7/28/47; am and ren 3/28/58; R 5/26/81]

§13-95-53 [~~Spiny lobster.~~] Ula (spiny lobster).

(a) It is unlawful for any person to take, kill, possess, or sell any [~~spiny lobster~~] ula less than three and one-fourth inches in carapace length, measured in a straight line along the carapace or head, from the ridge between the two largest spines above the eyes to the rear edge of the carapace.

(b) It is unlawful for any person to take, kill, possess, or sell any [~~spiny lobster~~] ula taken from the waters within the jurisdiction of the State during the months of May, June, July, and August.

(c) The possession of any [~~spiny lobster~~] ula by any person during the months of May, June, July, and August [~~shall be~~] is prima facie evidence that the person is guilty of a violation of this section; provided that any commercial marine dealer may sell, or any hotel, restaurant, or other public eating house may serve [~~spiny lobster~~] ula lawfully caught during the open season by first procuring a license to do so pursuant to section 13-74-41.

(d) It is unlawful for any person to take, kill, possess, or sell any [~~spiny lobster~~] ula with eggs. Any [~~spiny lobster~~] ula with eggs caught must immediately be returned to the waters from which the [~~spiny lobster~~] ula was taken. The possession of any [~~spiny lobster,~~] ula showing indications of [~~the~~] its eggs having been scraped or removed [~~therefrom, shall be~~] is prima facie evidence of [~~the~~] a violation of this section.

(e) It is unlawful for any person to pursue, take, or kill any [~~spiny lobster~~] ula in the State with a spear.

(f) It is unlawful for any person to possess or sell any speared [~~spiny lobster.~~] ula.

(g) It is unlawful for any person to possess or sell any [~~spiny lobster~~] ula in a condition where the body is mutilated, or the carapace and tail are separated.

(h) It is unlawful for any person to take or kill any female [~~spiny lobster.~~] ula. [Eff 12/3/98; am and comp 1/31/21; am and comp]
(Auth: HRS §§187A-5, 188-53) (Imp: HRS §§187A-5, 188-57)

Historical note: Subsections 13-95-53(a) and (g) are based substantially upon Chapter 89 of Title 13. [Eff 5/26/81; am 6/6/83; am 6/25/84; am and comp 2/6/87; am and comp 5/5/88; am and comp 8/14/89; R 1/31/21] Chapter 89 of Title 13 was based substantially upon Regulation 22 of the Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii. [Eff 3/28/58; am 10/6/58; am 7/9/59; am 7/18/59 (Governor's approval date); am 9/17/60 (Governor's approval date); am 8/4/78; R 5/26/81]

§13-95-54 [~~Slipper lobster.~~] Ula pāpapa (slipper lobster). (a) It is unlawful for any person to take, kill, possess, or sell any [~~slipper lobster~~] ula pāpapa less than two and three-fourths inches in tail width, measured in a straight line across the widest spot of the tail between the first and second abdominal segments.

(b) It is unlawful for any person to take, kill, possess, or sell any [~~slipper lobster~~] ula pāpapa taken from the waters within the jurisdiction of the State during the months of May, June, July, and August.

(c) The possession of any [~~slipper lobster~~] ula pāpapa by any person during the months of May, June, July, and August [~~shall be~~] is prima facie evidence that the person is guilty of a violation of this section; provided that any commercial marine dealer

may sell, or any hotel, restaurant, or other public eating house may serve [~~slipper lobster~~] ula pāpapa lawfully caught during the open season by first procuring a license to do so pursuant to section 13-74-41.

(d) It is unlawful for any person to take, kill, possess, or sell any [~~slipper lobster~~] ula pāpapa with eggs. Any [~~slipper lobster~~] ula pāpapa with eggs caught must immediately be returned to the waters from which the [~~slipper lobster~~] ula pāpapa was taken. The possession of any [~~slipper lobster,~~] ula pāpapa showing indications of [~~the~~] eggs having been scraped or removed [~~therefrom, shall be~~] is prima facie evidence of [~~the~~] a violation of this section.

(e) It is unlawful for any person to pursue, take, or kill any [~~slipper lobster~~] ula pāpapa in the State with a spear.

(f) It is unlawful for any person to possess or sell any speared [~~slipper lobster.~~] ula pāpapa.

(g) It is unlawful for any person to possess or sell any [~~slipper lobster~~] ula pāpapa in a condition where the body is mutilated, or the carapace and tail are separated. [Eff 12/3/98; am and comp 1/31/21; am and comp] (Auth: HRS §§187A-5, 188-53) (Imp: HRS §§187A-5, 188-57)

Historical note: Subsections 13-95-54(a) and (g) are based substantially upon chapter 89 of title 13 [Eff 5/26/81; am 6/6/83; am 6/25/84; am and comp 2/6/87; am and comp 5/5/88; am and comp 8/14/89; R 1/31/21] Chapter 89 of title 13 was based substantially upon regulation 22 of the Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii. [Eff 3/28/58; am 10/6/58; am 7/9/59; am 7/18/59 (Governor's approval date); am 9/17/60 (Governor's approval date); am 8/4/78; R 5/26/81]

§13-95-55 [~~He'e.~~] He'e (tako). It [~~shall be~~] is unlawful for any person to take, possess, or sell any [~~he'e~~] he'e less than one pound in weight. [Eff

12/19/02; comp 1/31/21; am and comp]
(Auth: HRS §187A-5) (Imp: HRS §187A-5)

Historical Note: Section 13-95-55 is based substantially upon Chapter 86 of Title 13. [Eff 5/26/81; R 12/19/02] Chapter 86 of Title 13 was based substantially upon Regulation 18 of the Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii. [Eff 3/28/58; am 10/6/58; R 5/26/81]

§13-95-70 Stony corals. (a) Except as otherwise provided in this section or authorized by law:

- (1) Subject to subsections (b) and (c), it is unlawful for any person to take, break, or damage any stony coral, except as provided in sections 171-58.5 and 205A-44, HRS;
- (2) It is unlawful for any person to damage any stony coral by any intentional or negligent activity causing the introduction of sediment, biological contaminants, or pollution into state waters;
- (3) It is unlawful for any person to sell any stony coral; except that stony coral rubble pieces or fragments imported for the manufacture and sale of coral jewelry, or dead stony coral obtained through legal dredging operations in Hawaii for agricultural or other industrial uses, may be sold.

(b) No liability shall be imposed under subsection (a)(1) of this section for inadvertent breakage, damage, or displacement of an aggregate area of less than one half square meter of coral if caused by:

- (1) A vessel with a single anchor damage incident, in an area where anchoring is not otherwise prohibited, and not more frequently than once per year; or

(2) Accidental physical contact by an individual person.

(c) The [~~Department~~] department may authorize damage to stony corals for the development or operation of renewable energy projects and shall require mitigation to offset any stony coral losses.

(d) Any person found in violation of any provision of this section pursuant to a criminal prosecution shall be subject to penalty as provided under section 187A-13, HRS. Any person found in violation of any provision of this section pursuant to civil or administrative action shall be subject to penalty as provided under section 187A-12.5, HRS. [Eff 12/03/98; am 12/09/02; am 5/01/14; am 10/19/18; comp 1/31/21; am and comp] (Auth: HRS §§187A-5, 189-6, 190-3) (Imp: HRS §§187A-6, 187A-12.5, 187A-13, 188-68, 189-6, 190-1, 190-3, 190-5)

§13-95-71 Live rocks. (a) Except as otherwise provided in this section or authorized by law:

- (1) Subject to subsections (b) and (c), it is unlawful for any person to take, break, or damage any live rock;
- (2) Subject to subsection (b), it is unlawful for any person to damage any live rock by any intentional or negligent activity causing the introduction of sediment, biological contaminants, or pollution into state waters; and
- (3) It is unlawful for any person to sell any live rock.

(b) No liability shall be imposed under subsections (a)(1) or (a)(2) of this section for inadvertent breakage, damage, or displacement of an aggregate area of less than one square meter of live rock bottom cover.

(c) The [~~Department~~] department may authorize damage to live rock for the development or operation of renewable energy projects and shall require mitigation to offset any live rock losses.

(d) Any person found in violation of any provision of this section pursuant to a criminal prosecution shall be subject to penalty as provided under section 187A-13, HRS. Any person found in violation of any provision of this section pursuant to civil or administrative action shall be subject to penalty as provided under section 187A-12.5, HRS." [Eff 12/03/98; am 12/09/02; am 5/01/14; am 10/19/18; comp 1/31/21; am and comp] (Auth: HRS §§187A-5, 189-6, 190-3) (Imp: HRS §§187A-6, 187A-12.5, 187A-13, 188-68, 189-6, 190-1, 190-3, 190-5)

2. Material, except source notes and other notes, to be repealed is bracketed and stricken. New material is underscored.

3. Additions to update source notes and other notes to reflect these amendments and compilation are not underscored.

4. These amendments to and compilation of chapter 13-95, Hawaii Administrative Rules shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on _____, and filed with the Office of the Lieutenant Governor.

DAWN N.S. CHANG
Chairperson, Board of Land
and Natural Resources

APPROVED AS TO FORM:

Deputy Attorney General

IV. Legislative Matters

A. Update on Governor's Message Submitted for Consideration for the Gubernatorial Nomination of Jennifer Salisbury to the Small Business Regulatory Review Board for a term to expire June 30, 2027

No Handout

V. Administrative Matters

A. Update on the Board's Upcoming Advocacy Activities and Programs in accordance with the Board's Powers under Section 201M-5, HRS

1. Board's Budget Request
2. Presentations to Industry Associations
3. Staff's Small Business Outreach
4. Director Letters and Meetings with State Agencies and Counties

No Handouts