HAWAII ADMINISTRATIVE RULES

TITLE 4 DEPARTMENT OF AGRICULTURE

SUBTITLE 6 DIVISION OF PLANT INDUSTRY

CHAPTER 67

SEED RULES

Objectives
Definitions
Noxious weed seed
Limitations on noxious weed seed
Labeling requirements
Extension of germination test date
Repealed
Tolerances
Repealed
Germination standard
Seed certification standards
Service fees
Seed license

<u>Historical Note</u>: This chapter is based substantially upon Regulation 2 entitled "Seed Regulation" of the division of plant industry, department of agriculture. [Eff. 3/5/46, am 12/20/61, am 8/1/64, am 1/29/71, am 2/25/74, R 7/13/81]

§4-67-1 <u>Objectives</u>. The objectives of this chapter are to implement the requirements of chapter 150, Hawaii Revised Statutes, and to establish criteria for seed analyses and certification. [Eff. 7/13/81; comp] (Auth: HRS §150-22) (Imp: HRS §\$150-22, 150-23, 150-24, 150-25, 150-26, 150-27, 150-28)

§4-67-2 Definitions. As used in this chapter:

"Inoculant" means a substance containing nitrogen fixing bacteria;

"Prohibited noxious weed seed" is seed which is prohibited from being present in agricultural and vegetable seed lots;

"Restricted noxious weed seed" is seed which is singly or collectively

limited to 32 seeds per pound of agricultural and vegetable seed;

"Seed certification" means the process of regulating the production and labeling of seed to comply with the standards of the official seed certifying agency of the State;

"Treated" means that the seed has received an application of a substance, or that it has been subjected to a process for which a claim is made.

[Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §150-22)

§4-67-3 <u>Noxious weed seed</u>. (a) The following are declared prohibited noxious weed seed:

Scientific Name Common Name

Acacia mearnsii black wattle

Acaena novae-zelandiae New Zealand bur,

piripiri

Acroptilon repensRussian knapweedAegilops triuncialisbarb goatgrassAeschynomene indicaKat sola, Indian

jointvetch

Ageratina adenophora croftonweed, Maui

pamakani

Ageratina altissima white snakeroot

Ageratina riparia creeping croftonweed,
Hamakua pamakani

Alhagi maurorum camelthorn

Allium vineale wild garlic

Ambrosia spp. ragweeds

Andropogon bicornis West Indian foxtail
Andropogon virginicus broomsedge

Ardisia elliptica shoebutton ardisia

Aristida spp. three-awns Astragalus spp. locoweeds

Bocconia frutescens plume poppy

Cardaria draba hoary cress

Cardaria pubescenshairy whitetopCentaurea solstitialisyellow starthistleCereus uruguayanusspiny tree cactus,Peruvian apple

Chromolaena odorata siamweed, bitterbush

Cirsium arvense Canada thistle

<u>Clidemia hirta</u> var. <u>hirta</u> Koster's curse, curse

Coccinia grandis ivy gourd

Scientific Name Common Name

<u>Convolvulus arvensis</u> field bindweed <u>Convolvulus sepium</u> hedge bindweed

Cortaderia jubata

Cymbopogon refractusbarbwire grassCyperus esculentusyellow nutsedgeCytisus monspessulanusFrench broomCytisus scopariusScotch broomDichrostachys nutansmarabu

Elephantopus mollis elephantopus, elephant's foot

Elytrigia repens quackgrass

Emex spinosa spiny emex Eriocereus martinii

Euphorbia esula leafy spurge

Gaura spp. gaura

<u>Grevillea banksii</u> kahiliflower, Bank's

Halogeton glomeratus halogeton
Heliantus ciliaris blueweed

<u>Heliantus ciliaris</u> blueweed <u>Hypericum perforatum</u> common St. John's-wort

Hyptis pectinata comb hyptis

Hyptis suaveolenswild spikenardImperata cylindricacogongrass

Lagascea mollis acuate

<u>Lepidium</u> <u>latifolium</u> perennial pepperweed

Malachra alceifolia malachra

Medinilla venosa

Melastoma spp. melastoma Miconia spp. miconia

Mikania micranthamile-a-minuteMikania scandensclimbing hempweedMimosa invisa giant sensitiveplantMimosa pigra

sensitiveplant

<u>Miscanthus floridulus</u> miscanthus, Japanese

silvergrass tree daisy

moon cactus

Montanoa hibiscifolia

Myrica faya firetree, candleberry

myrtle

Oxyspora paniculata

Oxytropis spp. locoweeds Panicum repens torpedograss

<u>Passiflora mollissima</u> banana pasionfruit, banana poka

<u>Passiflora pulchella</u> wingleaf passionfruit

<u>Pennisetum</u> <u>setaceum</u> fountaingrass

Piper aduncum spiked pepper

Scientific Name Common Name

<u>Pittosporum undulatum</u> Victorian box

Prosopis juliflora

Pueraria phaseoloidestropical kudzuRhodomyrtus tomentosadowny rosemyrtleRorippa austriacaAustrian fieldcress

Rubus argutus prickly Florida

blackberry

Rubus ellipticus yellow Himalayan

var. <u>obcordatus</u> raspberry

Rubus niveushill raspberryRubus sieboldiiMolucca raspberrySalsola kaliRussian thistle

<u>Senecio madagascariensis</u> fireweed <u>Solanum carolinense</u> horsenettle

Solanum elaeagnifolium silverleaf nightshade

Solanum robustum

Solanum rostratum buffalo bur

Solanum torvumturkeyberry, teronganSonchus arvensisperennial sowthistleSpartium junceumSpanish broomStipa trichotomanasella tussock

Striga spp. witchweeds

<u>Taeniatherum caput-medusae</u> medusahead <u>Themeda villosa</u> Lyon's grass

<u>Tibouchina</u> spp. tibouchina

<u>Triumfetta rhomboidea</u> paroquet bur <u>Triumfetta semitriloba</u> Sacramento bur

<u>Ulex</u> <u>europaeus</u> gorse

Urena lobata caesarweed

Verbascum thapsus mullein

(b) The following species are declared restricted noxious weed seed:

<u>Acanthospermum hispidum</u> star bur

Asclepias spp. milkweeds

<u>Carduus</u> spp. plumeless, musk, or

curled thistle oxeve daisy

Chrysanthemumleucanthemumoxeye daisyCrotalarialongirostratalongbeak rattlepodCrotalariaspectabilisshowy crotalaria

Cuscuta spp. dodders

Elephantopus spp. elephantopus

(except <u>E</u>. <u>mollis</u>) Emex australis emex

Euphorbia serratatoothed spurgeLactuca pulchellablue lettuceSorghum almumalmum sorghumSorghum halepensejohnsongrass

Scientific Name Common Name

Stipa spp. needlegrasses

<u>Tagetes</u> minuta wild marigold

<u>Tribulus terrestris</u> puncturevine

Xanthium spp. cockleburs

[Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §152-1, 152-4)

§4-67-4 <u>Limitations on noxious weed seed</u>. No person shall sell, offer, or expose for sale within the State, for planting purposes, agricultural or vegetable seed:

- (1) Consisting of or containing prohibited noxious weed seed; or
- (2) Consisting of or containing more than 32 seeds of restricted noxious weed seed singly or collectively per pound.

[Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §8150-22, 150-23)

- §4-67-5 <u>Labeling requirements</u>. (a) Each container of agricultural or vegetable seed sold or offered for sale within the State for planting purposes shall bear, or have attached in a conspicuous place, a plainly written or printed label or tag in the English language giving the following information:
 - (1) The name and rate of occurrence per pound of each noxious weed seed present; and
 - (2) The net weight, count, or if the seed is placed in a germination medium, mat, tape, planting container or other device, the minimum number of seed.
- (b) In addition to complying with subsection (a), tags or labels of all treated agricultural and vegetable seed shall provide the following information:
 - (1) The word "treated" or a statement indicating that the seed has been treated, either of which shall be printed in type not smaller than eight-point; and
 - (2) The commonly accepted coined, chemical or abbreviated chemical (generic) name, or scientific name of the applied substance; and

- (3) If the substance in the amount present with the seed is harmful to humans or other vertebrate animals, the seed shall be labeled with a caution statement such as, "Do not use for food, feed, or oil purposes." The caution for mercurials and similarly toxic substances shall be a representation of a skull and crossbones at least twice the size of the type used for information required to be on the label under substance b, paragraph 1, and shall also include in red letters on a background of distinctly contrasting color, a statement worded substantially as follows: "This seed has been treated with Poison," "Treated with Poison," "Poison treated," or "Poison." The word "Poison" shall be in type not smaller than eight-point; and
 - (4) If the seed is treated with an inoculant, a statement indicating the month and year which the inoculant is no longer considered effective, such as, "Inoculant not claimed to be effective after (month and year)."
- (c) In addition to complying with subsection (a), tags or labels of vegetable seed in containers of more than one pound shall provide the following information:
 - (1) The percentage of germination exclusive of hard seed; and
 - (2) The percentage of hard seed, if present; and
 - (3) The month and year the test was completed to determine the percentage.
- (d) In addition to complying with subsection (a), tags or labels of vegetable seed in containers of one pound or less shall provide the following information:
 - (1) A statement indicating the year for which the seed was packed for sale such as "Packed for 1991;" or
 - (2) The germination percentage and the month and year the test was completed to determine the percentage.
- (e) In addition to complying with subsection (a), tags or labels of seed packaged in hermetically-sealed containers shall provide the following information:
 - (1) A statement indicating that the container is hermetically-sealed; and

- (2) A statement indicating that the seed has been preconditioned as to moisture content; and
- (3) The month and year in which the germination test was completed.

[Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §150-24, 150-25)

- §4-67-6 Extension of germination test date. The limitation on the date of test for agricultural and vegetable seed shall be extended to thirty-six months when all of the following conditions have been met:
 - (1) the seed was packaged in a hermetically-sealed container which does not allow water vapor penetration through any wall, including the seals, greater than 0.05 grams of water per twenty-four hours per one hundred square inches of surfare at 100° F. with a relative humidity (RH) on one side of ninety per cent and on the other side of zero per cent. Water vapor penetration (WVP) is measured by the standards of the United States Bureau of Standards as: gm $H_2O/24$ hour/100 square inch/ 100° F./90% RH V .0% RH:
 - (2) The seed was packaged within nine months after harvest;
 - (3) The percentage of germination of vegetable seed at the time of packaging was equal to or above the standard as provided in §4-67-14;
 - (4) The seed in the container does not exceed the percentage of moisture, on a weight basis, as listed in Table 1, "Maximum Percentage of Moisture Allowable by Weight in a Hermetically-Sealed Seed Container," dated June 18, 1992 located at the end of this chapter; and
 - (5) The container is labeled in accordance with the labeling requirements of §4-67-5.

[Eff. 7/13/81; am and comp] (Auth: HRS §\$150-22, 150-23) (Imp: HRS §\$150-23, 150-24, 150-25)

§4-67-7 REPEALED. [R]

§4-67-8 Tolerances. The tolerance to be applied in all seed testing procedures shall be as adopted by the Association of Official Seed Analysts, "Rules for Testing Seeds,: Vol. 12, No. 3, 1988, revised 1989, 1990 or, if no applicable tolerance is provided therein, as published in the Federal Seed Act regulations, Title 7, Chapter 201 of the Code of Federal Regulations, as it existed on January 1, 1991. Tolerances shall not be applied to prohibited noxious weed seed listed in §4-67-3. [Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §\$150-22, 150-23)

§4-67-9 REPEALED. [R]
§4-67-10 REPEALED. [R]
§4-67-11 REPEALED. [R]
§4-67-12 REPEALED. [R]
§4-67-13 REPEALED. [R]

§4-67-14 <u>Germination standards</u>. Standards for germination of vegetable seeds are found in Table 2, entitled "Germination Standards for Vegetable Seed," dated June 18, 1992 located at the end of this chapter. [Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §\$150-22, 150-23, 150-25)

§4-67-15 <u>Seed certification standards</u>. The standards for seed certification shall conform to the standards established by the Association of Official Seed Certifying Agencies, November 1979 edition and published in its Certification Handbook Publication No. 23 as amended January 1984. [Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §\$150-22, 150-24, 150-25)

- §4-67-16 <u>Service fees</u>. (a) The fee for purity analyses for all kinds of seed shall be five dollars (\$5.00) per analysis.
- (b) The fee for noxious weed seed examinations for all kinds of seed shall be five dollars (\$5.00) per examination.
- (c) The fee for germination tests for all kinds of seed shall be five dollars (\$5.00) per test.
- (d) There shall be no fee charged for the testing and analysis of a sample drawn by department personnel to determine whether the seed, label, or both are in compliance with the Hawaii Seed Law and rules.
 - (e) The fees for seed certification shall be as follows:
 - (1) Registration fee ... \$20.00 per seed lot;
 - (2) Acreage fee \$2.50 per acre for each seed lot; and
 - (3) Travel Actual cost of transportation, miscellaneous expenses, and the current state per diem.

[Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §150-22)

- §4-67-17 Seed License. (a) Application for a seed license shall be made on a form provided by the department.
- (b) The license shall expire on June 30 of each year and may be renewed on or before July 1 of each year.
- (c) A fee of twenty-five dollars (\$25.00) shall be assessed for each license.

[Eff. 7/13/81; am and comp] (Auth: HRS §150-22) (Imp: HRS §150-22, 150-29)

Table 1 Maximum Percentage of Moisture Allowable by Weight in a Hermetically-Sealed Seed Container

June 18, 1992

Agricultural Seed	Percent
Beet, field	7.5
Beet, sugar	7.5
Bluegrass, Kentucky	6.0
Clover, crimson	8.0
Fescue, red	8.0
Ryegrass, annual	8.0
Ryegrass, perennial	8.0
All others	6.0
Vegetable Seed	
Bean, garden	7.0
Bean, lima	7.0
Beet	7.5
Broccoli	5.0
Brussels sprouts	5.0
Cabbage	5.0
Carrot	7.0
Cauliflower	5.0
Celeriac	7.0
Celery	7.0
Chard, Swiss	7.5
Chinese cabbage	5.0
Chives	6.5
Collards	5.0
Corn, sweet	8.0
Cucumber	6.0
Eggplant	6.0
Kale	5.0
Kohlrabi	5.0
Leek	6.5
Lettuce	5.5
Muskmelon	6.0
Mustard, India	5.0
Onion	6.5
Onion, Welsh	6.5
Parsley	6.5
Parsnip	6.0
Pea	7.0 4.5
Pepper	4.5 6.0
Pumpkin	0.0

Vegetable Seed	<u>Percent</u>
Radish	5.0
Rutabaga	5.0
Spinach	8.0
Squash	6.0
Tomato	5.5
Turnip	5.0
Watermelon	6.5
All others	6.0

Table 2 Germination Standards for Vegetable Seed

June 18, 1992

Common Name	Percent
Artichoke	60
Asparagus	70
Asparagusbean	75
Bean, garden	70
Beans, lima	70
Beans, runner	75
Beet	65
Bittermelon	70
Broadbean	75
Broccoli	75
Brussel sprouts	70
Burdock, great	60
Cabbage	75
Cabbage, tronchuda	70
Cantaloupe (see muskmelon)	
Cardoon	60
Carrot	55
Cauliflower	75
Celeriac	55
Celery	55
Chard, Swiss	65
Chicory	65
Chinese cabbage	75
Chives	50
Choi-sum (flowering pak-choi)	75
Citron	65
Collards	80
Corn, sweet	75

Common Name	Percent
Cornsalad	70
Cowpea	75
Cress, garden	75
Cress, upland	60
Cress, water	40
Cucumber	80
Dandelion	60
Eggplant	60
Endive	70
Gherkin, West Indian	75
Kale	75
Kale, Chinese	75
Kohlrabi	75
Leek	60
Lettuce	80
Mizuna (potherb mustard)	75
Muskmelon	75
Mustard, India	75
Mustard, spinach	75
Okra	50
Onion	70
Onion, Welsh	70
Pak choi	75
Parsley	60
Parsnip	60
Pea	80
Pepper	55
Pumpkin	75
Radish	75
Rhubarb	60
Rutabaga	75
Salsify	75
Sorrel	65
Soybean	75
Spinach	60
Spinach, New Zealand	40
Squash	75
Tomato	75
Tomato, husk	50
Turnip	80
Watermelon	70