LCB File No. R230-05

PROPOSED REGULATION OF THE STATE DEPARTMENT OF AGRICULTURE

Note that more sections may be added at a later date; the agency is conducting a comprehensive review of the regulations pertaining to seeds

CHAPTER 587 - AGRICULTURAL PRODUCTS AND SEEDS

NAC 587.001 Definitions. (NRS 587.083) As used in this chapter, unless the context otherwise requires, the words and terms defined in NAC 587.004 and 587.006 have the meanings ascribed to them in those sections.

NAC 587.004 "Department" defined. (NRS 587.083) "Department" means the State Department of Agriculture.

NAC 587.006 "**Director" defined.** (NRS 587.083) "Director" means the Director of the Department.

Annual registration fee for each retail and wholesale distributor and shall pay a \$200 registration fee for each outlet registered.

The Director will deposit in a separate account only for expenditures such seed analyst, seed laboratory, seed enforcement activities related to the memorandum of understanding between The USDA Marketing Service all 50 states an the state of Nevada to enforce and support the Federal Seed Trade Act which governs all seed trade activity in Nevada and the United States.

NAC 587.010 Test for germination. (NRS 587.083) The test for germination:

- 1. For agricultural seed which is offered for sale, must be completed within an 18-month period; {12 month period}
- 2. For the seeds of vegetables which are offered for sale in containers of more than one pound, must be completed within an 18-month period; *{12 month period.}}*
- 3. For the seeds of trees which are offered for sale, must be completed within a 12-month period;
- 4. For seed in hermetically sealed containers shipped, delivered, transported or sold to a dealer for resale, must be completed within an 18-month period; *[12 month period.]* and
- 5. For seed in hermetically sealed containers offered for sale at retail, must be completed within a 36-month period, {12 month period.} exclusive of the month in which the test was completed.

NAC 587.020 Hermetically sealed containers. (NRS 587.083) The following standards govern the sale of hermetically sealed containers:

1. The seed must be packaged within 9 months after harvest.

2. The container must not allow penetration of water vapor through any wall, including the seals, greater than 0.05 grams of water per 24 hours per 100 square inches of surface at 100° Fahrenheit with a relative humidity on one side of 90 percent and on the other side of 0 percent. Penetration of water vapor is as defined by the U.S. Bureau of Standards as:

gm. $H_20/24$ hr./100 sq. in./100° F/90% RH V.0% RH.

3. The seed in the container must not exceed the percentage of moisture, on the basis of wet weight, as follows:

Agricultural Seeds	Percentage of Moisture
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
Mixtures of above	

Seeds of Vegetables	Percentage of Moisture
Bean, garden	7.0
Bean, lima	7.0
Beet	7.5
Broccoli	5.0
Brussels sprouts	5.0
Cabbage	5.0
Cabbage, Chinese	5.0
{Carrot}	<i>{7.0}</i>
Cauliflower	5.0
Celeriac	7.0
Celery	7.0
Chard, Swiss	7.5
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

	Percentage
Seeds of Vegetables	of Moisture
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
Pepper	4.5
Pumpkin	6.0
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

- 4. The container must be conspicuously labeled in not less than 8-point type to indicate the month and year of the test for germination, that the container is hermetically sealed and that the seed has been preconditioned as to moisture contained in the seed.
- 5. The percentage of germination of seeds of vegetables at the time of packaging must be equal to or above the standards in NAC 587.120.

NAC 587.140 Flower seeds: Germination standards. (NRS 587.083. 587.101, 587.103)

The kinds of flower seeds listed below are those for which standard testing procedures have been prescribed and therefore are required to be labeled with the germination percentage. For those kinds marked with an asterisk, the percentage is the total of percentage of germination and percentage of hard seed. For all other kinds, it is the percentage of germination:

	Minimum
	Germination
Kind	Standard
{Archilla- Archillea ptarmica}	50
African daisy - Dimorphotheca aurantiaca	55
{African Violet- Saintpaulia spp}	<i>30</i>
Ageratum - Ageratum mexicanum	60
{Agrostemma - Agrostemma coronaria}	<i>65</i>

Minimum

60

Germination Kind Standard Alyssum - Allyssum compactum, A. maritimum A. procumbens, A. saxatile 60 {Amaranthus-Amaranthus spp} *65* {Anagalis- Anangalisn arvensis } 60 Anemone - Anemone coronaria, A. pulsatilla 55 60 Angel's trumpet - Datura arborea Arabis - *Arabis alpine* 60 {Arctotis- Arctotis grandis} 45 {Ameria – America formosa } 55 {Aspragus fern- asparagus plumosus} *50* {Asparagus sprenger- Asparagus sprengeri } 55 Aster, China - Callistephus chinensist except Pompom Powder puff 55 and Princess types Aster, China - Callistephus chinensis, Pompom, Powder puff, and Princess types 50 45 Aubrietia - Aubrietia deltoids {Baby Smilax Asparagus- asparagoides} 25 Balsam - Impatiens balsamina 70 {Begonia (begonia fibrous rooted) 60 {Begonia (Begonia tuberous rooted} *50* {Bells of Ireland- Molucella laevis} 60 {Brachycome- Brachycome iberidifolia } 60 {Browallia- Browallia elata and B. speciosa} *65* {Bupthalum - Buphtalum salicifolium} *60* {Caceolaria- Calceolaria spp } *60* Calendula - Calendula officinalis 65 California poppy - Eschscholtzia california 60 Calliopsis - Coreopsis bocolor, C. drummondi, C. elegans 65 Campanula: 60 Canterbury bells - Campanula medium calycanthema Cup and Saucer bellflower - C. amanula calycanthema 60 Carpathian bellflower - Campanula capatica 50 Peach bellflower - Campanula persicifolia 50 Candytuft, annual - Iberis amara, I. umbellata 65 Candytuft, perennial - *Iberis gibraltarica*, *I. sempervirens* 55 *Castorbean - Ricinus communis 60 Cathedral bells - Cobaea scandens 65 Celosia - Celosia argentea 65

Centaurea:

Basketflower - Centaurea Americana

		Minimum Germination
Kind		Standard
Cornflower - Centaurea cyanus		60
Dusty Miller - Centaurea candidissima		60
Royal centaurea - Centaurea imperialis		60
Sweet Sultan - Centaurea moschata		60
Velvet centaurea - Centaurea gymnocarpa	60	
{ Cerasium- Cerastium biebersteini }	<i>65</i>	ī
Chinese forget-me-not - Cynoglossum amabile		55
Chrysanthemum, annual - Chrysanthemum carinatum, C.		
40 coronarium, C. segetum		
{Cineraria- Senecio cruentus}	<i>60</i>)
Clarkia - Clarkia elegans		65
Cleome - Cleome gigantean	65	
{Coleus-Cleus blumeri}	<i>65</i>	
Columbine - Aquilegia spp.		50
Coral bells - Heuchera sanguinea		55
Coreopsis, perennial - Coreopsis lanceolata	40	
{Corn, ornamental – Zea mays }	<i>75</i>	
Cosmos:		
Sensation, Mammoth and Crested type - Cosmos bipinnatus	·	
Klondyke type - C. sulphureus	65	
{Crossandra- Crossandra infundibuliformis }	<i>50</i>	
Dahlia - <i>Dahlia</i> spp.	55	
{Daylily- Hermerocallis spp. }	<i>45</i>	
Delphinium, perennial:		
Belladonna and Bellamosum types; Cardinal larkspur -		
Delphinium cardinale; Chinensis types; Pacific Giant, Go	old	
Medal and other hybrids of <i>D. elatum</i>		55
Dianthus:		
Carnation - Dianthus caryophyllus		60
China pinks - Dianthus chinensis, Heddewigi, Heddensis		70
Grass Pinks - Dianthus plumarius		60
Maiden pinks - Dianthus deltoids		60
Sweet William - Dianthus barbatus		70
Sweet Wivelsfield - Dianthus allwoodi	60	
{Didiscus –Didiscus coerulea}	<i>65</i>	
{Doronicum- Doronicum caucasicum}	<i>65</i>	
Dracena - Dracena indivisa	55	i
{ Dragon Tree- Dracaena indivisa}	<i>40</i>	
English daisy - Bellis perrennis		55
Foxglove - <i>Digitalis</i> spp.		60

Tiower Seeds		
		Minimum Germination
Kind		Standard
Gaillardia, annual - Gallardia pulchella, G. picta; perennial - G	G.	
grandiflora		45
Geum - Geum spp.		55
Gilia - Gilia spp.		65
Godetia - Godetia amoena, G. grandiflora		65
Gourds:		
Yellow flowered - Cucurbita pepo; White flowered - Lager	ıaria	
sisceraria; Luga cylindrical		70
Gypsophila:		
Annual baby's breath - Gypsophila elegans; Perennial baby	's	
breath - G. paniculata, G. pacifica, G. repens	70)
{Helenium –Helenium autumnale}	40	
Helichrysum - Helichrysum monstrosum	60	
{Heliopsis- Heliopsis scabra}	<i>55</i>	
{Heliotrope- Heliotropium spp.}	<i>35</i>	
{Helipterum- Helipterum roseum}	60)
{Hesperis- Hesperis matrnalis}	<i>65</i>	
*Hollyhock - <i>Althea rosea</i>	65	
{Hunnemania- Hunnemania fumariaefolia}	60	
{Hyacinh bean- Dolichos lablab}	70	
{Impatiens- Impatiens hostii}	<i>55</i>	
*Ipomoea:		
Cypress vine - <i>Ipomoea quamoclit</i> ; Moonflower - <i>I. noctifle</i>	ora;	
Morninglories, Cardinal Climber, Hearts and Honey Vin		
Ipomoea spp.	75	
{Jerusulem cross- Lychnis chalcedonica}	<i>70</i>	
Job's Tears - Coix lacrymajobi		70
Kochia - Kochia childsii		55
Larkspur, annual - Delphinium ajacis		60
Lantana - Lantana camara, L. hybrida	35	
{Lilium- Lilium regale}	<i>50</i>	
Linaria - <i>Linaria</i> spp.		65
Lobelia, annual - Lobelia erinus		65
Lunaria, annual - Lunaria annua		65
*Lupine - <i>Lupinus</i> spp.		65
Marigold - <i>Tagetes</i> spp.		65
Marvel of Peru - Mirabilis jalapa	60	
{Matricaria- Matricaria spp}	<i>60</i>	
Migonette - Reseda odorata		55

		Minimum Germination
Kind		Standard
Myosotis - Myosotis alpestris, M. oblongata, M. pulastris		50
Nasturtium - <i>Tropaeolum</i> spp.		60
Nemesia - Nemesia spp.		65
Nemophila - Nemophila insignis		70
Nicotiana - Nicotiana affinis, N. sanderae, N. sylvestris		65
Nierembergia - Nierembergia spp.		55
Nigella - Nigella damascena		55
Pansy - Viola tricolor		60
Penstemon - Penstemon barbatus, P. grandiflorus, P. laevigatu	ıs, P.	60
pubescens		60
Petunia - <i>Petunia</i> spp.		45
Phacelia - Phacelia companularia, P. minor, P. tanacetifolia		65 5.5
Phlox, annual - <i>Phlox drummondi</i> , all types and varieties	60	55
Physalis - <i>Physalis</i> spp.	60	
{Platycodon = Platycodon grandiflorum	<i>60</i>	
{Plumbago- Plumbago capenisis	50	
{ Pony tail- Beaucarnea recurvata}	<i>40</i>	
Poppy:		
Shirley poppy - Papaver rhoeas; Iceland poppy - P. nudicat	ıle;	
Oriental poppy - P. orientale; Tulip poppy - P. glaucum		60
Portulaca - Portulaca grandiflora	55	
{Primula- Primula spp}	<i>50</i>	- 0
Salpiglossis - Salpiglossis gloxinaeflora, S. sinuata		60
Salvia - Scarlet Sage - Salvia splendens; Mealycup Sage		
(bluebedder) - S. farinace		50
Saponaria - Saponaria ocymoides, S. vaccaria		60
Scabiosa, annual - Scabiosa atropurpurea		50
Scabiosa, perennial - Scabiosa caucasica		40
Schizanthus - Schizanthus spp.		60
Shasta Daisy - Chrysanthemum maximum, C. leucanthemum	65	
{Silk Oak- Grevillea robusta }	<i>25</i>	
Snapdragon - Antirrhinum spp.	- 0	55
Solanum - <i>Solanum</i> spp.	60	
{Statice- Statice sinuate}	<i>50</i>	
Stock:		
Common - Matthiola incana; Evening scented-Mathiola bio		65
Sunflower - Helianthus spp.	65	
{Sunrose- Helianthemum spp.}	<i>30</i>	
*Sweet pea, annual and perennial other than dwarf bush - Lath	yrus	75

Minimum

Kind		ermination Standard
odoratus, L. latifolius		
*Sweet pea, dwarf - Lathyus odoratus	65	
{Tahoka daisy- Machaeanthera tanacetifolia }	<i>60</i>	
Thunbergia - Thunbergia alata		60
Torch flower - Tithonia speciosa		
70		
{Torenia- Torenia fournieri}	<i>70</i>	
Tritoma - Kniphofia spp.		65
Verbena, annual - Verbena hybrida		35
Vinca - Vica rosea		60
Viola - Viola cornuta	55	
{Virginian stocks-Malcolmia maritime}	<i>65</i>	
Wallflower - Cheiranthus allioni	65	
{Yucca- Yucca filamentosa }	<i>50</i>	
Zinnia (except linearis and creeping) - Zinnia lineais, Salvitalia		
procumbens		50
*Including Hard Seed		

NAC 587.173 Prohibited noxious weed seeds. (NRS 587.083) Seed of the following plants are classified as prohibited noxious weed seeds, the occurrence of which must not exceed the tolerances prescribed by NAC 587.200:

- 1. Camelthorn (Alhagi camelorum).
- 2. Fieldcress, Austrian (Rorippa austriaca).
- 3. Goatgrass, barb (Aegilops triuncialis).
- 4. Halogeton (Halogeton glomeratus).
- 5. Horse nettle, Carolina (Solanum carolinense).
- 6. Horse nettle, white (*Solanum elaeagnifolium*).
- 7. Klamath weed (*Hypericum perforatum*).
- 8. Knapweed, Russian (Centaurea repens).
- 9. Medusa head, rye (*Taeniatherum asperum*).
- 10. Peaweed, Austrian (Swainsona salsula).
- 11. Quackgrass (Agropyron repens).
- 12. Skeletonweed, rush (*Chondrilla juncea*).
- 13. *Sorghum* spp., perennial, including, but not limited to, Johnson grass, sorghum almum and perennial sweet sudangrass.
 - 14. Sowthistle, perennial (Sonchus arvensis).
 - 15. Spurge, leafy (Euphorbia esula).
 - 16. Starthistle, Iberian (Centaurea iberica).
 - 17. Starthistle, purple (*Centaurea calcitrapa*).
 - 18. Starthistle, yellow (*Centaurea solstitialis*).

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19. Thistle, Canada (Cirsium arvense).
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- 20. Toadflax, Dalmatian (Linaria dalmatica).
- 21. Whitetop or Hoarycress (Cardaria pubescens).

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{ African Rue } (Peganum harmala) 
{ Common crupina} (Crupina vulgaris) 
{ Dyer's woad} (Isatis tinctoria)
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{ Eurasian water-milfoil} (Myriophyllum spicatum) { Giant Salvinia} (Salvinia molesta)

{ Goats Rue} (Galega officinalis)
{ Houndstongue} (Cynoglossum officinale)
{ Hydrilla} (Hydrilla verticillata)
{ Iberian star thistle} (Centaurea iberica)
{ Leafy spurge} (euphorbia esula)
{ Mayweed Chamomile} (Anthemis cotula)

{ Mediterranean sage} (Salvia aethiopis)

{ Purple loose strife} (Lythrum salicaria, L.virgatum& cultivars)

{ Spotted knapweed} (Centaurea maculosa) { Squarrose star thistle } (Centaurea virgata) { Sulfur cinquefoil} (Potenntilla recta) { Syrian bean caper} (Zygophyllum fabago)

NAC 587.175 Restricted noxious weed seeds. (NRS 587.083) Seed of the following plants are restricted noxious weed seeds, the occurrence of which must not exceed 27 per pound, singly or collectively:

- 1. Bindweed, field (Convolvulus arvensis).
- 2. Crabgrass (Digitaria sanguinalis, Digitaria ischaemum).
- 3. Dock, curly (Rumex crispus).
- 4. Dodder, all species (*Cuscuta* spp.).
- 5. Mustard, wild (Charlock) (Brassica kaber).
- 6. Pennycress (Fanweed) (*Thlaspi arvense*).
- 7. Puncture vine (*Tribulus terrestris*).
- 8. Sandbur, field (Cenchrus pauciflorus).

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{Diffuse knapweed} (Centaurea diffusa)
{Musk Thistle} (Carduus nutans)
{Scotch Thistle} (Onopordum acanthium)
{Black henbane} (Hyoscyamus niger)
{Green fountain grass} (Pennisetum setaceum)
{Perennial pepperweed} (Lepidium latifolium)
{Poison Hemlock} (Conium maculatum)
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{ Salt cedar- tamarisk} (Tamarix spp.)

{ Water Hemlock} (Cicuta macula)

NAC 587.254 Certification: Application; annual registration of perennial crops; fees. (NRS 587.077, 587.083)

1. Application for certification must be made on a form obtained from or approved by the Department for each site.

- 2. To maintain certification, a perennial crop must be registered each year, including the seedling year, whether or not a seed crop is harvested during that year.
- 3. Applications must be accompanied by the applicable acreage and other fees set forth in subsection 7.
 - 4. Except as otherwise provided in subsection 5, applications are due on the following dates:
- (a) Alfalfa, grass, clover, rapeseed, woody plants and forbs of the foundation, registered or certified class, April 1, or, if the crop is planted after April 1, within 30 days after planting.
- (b) Small grain and beans and field crops, other than those described in paragraph (a), of the foundation, registered or certified class, May 1, or, if the crop is planted after May 1, within 30 days after planting.
- (c) Seed fields or orchards of the selected or tested class, at least 30 days before planting or, for renewal of perennial crops of seed fields or orchards of the selected or tested class, May 1.
 - (d) Natural stands of the selected or tested class, at least 15 days before the first harvest.
 - (e) Natural stands of the source identified class, at least 3 days before harvest.
 - (f) Planted stands of the source identified class, May 1.
- 5. The Department may, upon a showing of good cause, accept an application for certification filed after the date required for filing provided in subsection 4.
- 6. In addition to any other requirements, an applicant for certification of a source-identified class shall submit a site collection log and the fee for the site collection log set forth in subsection 7 to the Department within 7 days after the period for seed collection ends.
 - 7. The Department shall charge the following fees:
 - (a) For an application for a field crop:

	Acreage	Production
Crop	Per Acre	Clean Seed
		\$.15/cwt
Alfalfa	\$4	{\$.25/cwt}
		.15/cwt
Beans	5	{.25/cwt}
		.15/cwt
Clover	4	{.25/cwt}
		.15/cwt
Grass	4	<i>{.25/cwt}</i>
		.15/cwt
Rapeseed	4	{.25/cwt}
		.10/cwt
Small grains	4	<i>{.20/cwt}</i>
		.15/cwt
Woody plants and forbs	4	{.25/cwt}
		.15/cwt
Other field crops	4	<i>{.25/cwt}</i>

- (b) For pre-variety germplasm of the:
 - (1) Tested Class:
 - (I) Seed fields or orchards, \$4 per acre plus \$.25 per tag if tags are requested; and

- (II) Natural stands, \$50 for each application for certification for each site plus \$.25 per tag if tags are requested;
 - (2) Selected Class:
 - (I) Seed fields or orchards, \$4 per acre plus \$.25 per tag if tags are requested; and
- (II) Natural stands, \$50 for each application for certification for each site plus \$.25 per tag if tags are requested; and
- (3) Source Identified Class, \$10 for each application for certification of each site and \$50 per site collection log plus \$.10 per pound of clean seed if tags are requested.

The Department shall charge an acreage fee of at least \$25 per field.

- 8. In addition to any other fees, the Department may charge a fee of \$50 per field if a reinspection of the field is required to determine eligibility for certification.
- 9. Except as otherwise provided in subsection 10, the Department will bill production fees after the seed is cleaned and only if the lot meets certification standards.
 - 10. For seeds conditioned out of State:
- (a) The Department will not charge production fees for seeds that are tagged out of State through interagency certification.
- (b) The Department will charge production fees for seeds for which tags are requested from the Department.
- 11. The Department will collect acreage fees on all perennial crops in the year of seeding and in each calendar year thereafter.
 - 12. The Department shall refund the acreage fee:
 - (a) For all crops, if the application is withdrawn in writing before a field inspection.
- (b) For a perennial crop for any year, except the seedling year, if the Department is notified that the crop is not intended to produce seed. The Department must be notified in writing before the field is inspected.
- 13. As used in this section, "pre-variety germplasm" has the meaning ascribed to it in NAC 587.3396.