Chapter Ag 20

AGRICULTURAL AND VEGETABLE SEEDS

Ag 20.01 Definitions. (1) The term "origin" means the state, Alaska, District of Columbia, Hawaii, Puerto Rico, or possession of the United States, or the foreign country or designated portion thereof, where the seed was grown.

(2) The term "kind" means one or more related species or subspecies which singly or collectively is known by one common name, for example, wheat, oat, vetch, sweet clover, cabbage, cauliflower, and so forth.

(3) The term "variety" means a subdivision of a kind which is characterized by growth, plant, fruit, seed, or other characters by which it can be differentiated from other sorts of the same kind, for example, Marquis wheat, Flat Dutch cabbage, Manchu soy beans, Oxheart carrot, and so forth.

(4) The term "type" means either (a) a group of varieties so nearly similar that the individual varieties cannot be clearly differentiated except under special conditions, or (b) when used with a variety name means seed of the variety named which may be mixed with seed of other varieties of the same kind and of similar character. If the type designation does not include a variety name, it shall include a name descriptive of a group of varieties of similar character and the pure seed shall be at least 90% of one or more varieties all of which conform to the type designation.

(5) The term "germination" means seeds capable of producing normal seedlings under ordinarily favorable conditions (not including seeds which produce weak, malformed, or obviously abnormal sprouts).

(6) The term "hard seeds" means seeds which because of hardness or impermeability do not absorb moisture or germinate under prescribed tests but remain hard during the period prescribed for germination of the kind of seed concerned.

(7) The term "inert matter" means broken seeds when one-half or less; seeds of legumes or crucifers with the seed coats removed; undeveloped and badly injured weed seeds such as sterile dodder which, upon visual examination, are clearly incapable of growth; empty glumes of grasses; attached sterile glumes of grasses (which must be removed from the fertile glumes except in Rhodes grass); (dirt, stones, chaff, fungus bodies such as ergot and other sclerotia and smut balls); and any other matter other than seeds shall be considered inert matter.

Ag 20.02 Origin. The origin of alfalfa seed, seed grains and seed corn is considered important and shall be stated on labels. If origin is unknown, that fact shall be stated.

Ag 20.03 Germination. Germination of seed containing hard seed shall be recorded on the label by one of the following methods:

(1) Germination . . . % including . . . % Hard Seeds

or

(2) Germination including Hard Seeds _____ . . . %
Hard Seeds _____ . . . %

or

(3) Germination _____ . . . %
Hard Seeds _____ . . . %
Germination and Hard Seeds _____ . . . %

Ag 20.04 Certifying agency. The department approves the Wisconsin agricultural experiment association as the agency satisfactory for the performance of seed certification in Wisconsin. In other states and in Canada, the department approves that agency officially recognized by the department of agriculture of that state or province as satisfactory for the performance of seed certification.

Ag 20.05 Permits. Applications for permits shall be made on forms prescribed by the department. No person issued a permit under authority of section 94.42, Wis. Stats., shall use or refer to it in any manner that would imply that the department recommends or approves the seeds sold, offered or exposed for sale.

Ag 20.06 Methods. The methods and procedures used in making purity analyses and germination tests shall be those adopted by the U. S. department of agriculture in the administration of the federal seed act.

Ag 20.07 Sampling. (1) METHOD. (a) In order to secure a representative sample, equal portions shall be taken from evenly distributed parts of the quantity of seed or screenings to be sampled.

(b) For free-flowing seed in bags or bulk, a probe or trier shall be used. For small free-flowing seed in bags a probe or trier long enough to sample all portions of the bag shall be used.

(c) Non-free flowing seed, such as a certain grass seed, uncleaned seed, or screenings, difficult to sample with a probe or trier, shall be sampled by thrusting the hand into the bulk and withdrawing representative portions.

(d) The portions shall be combined into a composite sample or samples.

(e) As the seed is sampled each portion shall be examined and, whenever there appears to be lack of uniformity, additional samples shall be taken to show such lack of uniformity as may exist.

(2) BULK. Bulk seeds shall be sampled by inserting a long probe or thrusting the hand into the bulk as circumstances require in at least 7 uniformly distributed parts of the quantity being sampled.

(3) BAGS. (a) In quantities of 5 bags or less, each bag shall be sampled.

(b) In quantities of more than 5 bags, at least every fifth bag but not less than 5 bags shall be sampled.

(4) PACKETS. In sampling seed in packets, entire unopened packets shall be taken.

Ag 20.08 Size of sample. The following are minimum weights of samples of seed to be submitted for analysis, test or examination:

(1) Two ounces of the seed specified in section 94.39 (1) (i) 1, Wis. Stats.

(2) Four ounces of the seed specified in section 94.39 (1) (i) 2, Wis. Stats.

(3) Eight ounces of the seed specified in section 94.39 (1) (i) 3 and 4, Wis. Stats.

(4) Two pounds of the seed specified in section 94.39 (1) (i) 5, Wis. Stats.

Ag 20.09 Tolerances. The following tolerances shall be recognized between the percentages of rates of occurrence found by analysis, test or examination and percentages of rates of occurrence required or stated.

(1) PURITY PERCENTAGES. In the determination of the tolerance for the percentage of the distinguishable kind, type or variety (pure seed), weed seeds, other crop seeds, and inert matter, the sample shall be first considered as made up of 2 parts: (a) The percentage of the component (pure seed, weed seed, crop seed, or inert matter as the case may be) being considered, and (b) the difference between that percentage and 100. The number represented by (a) is then multiplied by the number represented by (b) and the product is divided by 100. The resulting number is then multiplied by .02 and the resulting product added to 0.2 or 0.6 as indicated in the following formulae:

Pure seed tolerance equals 0.6 plus $\left(0.2 \times \frac{a \times b}{100}\right)$

Weed seeds, other crop seeds and inert matter tolerance equals 0.2 plus $\left(0.2 \times \frac{a \times b}{100}\right)$

(2) GERMINATION. The following tolerances are applicable to the percentage of germination.

Found by test:	Tolerance
96 or over	5
90 or over but less than 96	6
80 or over but less than 90	7
70 or over but less than 80	8
60 or over but less than 70	9
Less than 60	10

(3) TOLERANCES FOR NOXIOUS WEED SEEDS. The determination of the number of noxious weed seeds present per unit weight shall be made on no less than the quantity of the seeds specified in section 94.39 (1) (i) 1 to 5, Wis. Stats. The following tolerances shall be recognized for rates of occurrences of noxious weed seeds. Representations showing the rates of occurrence indicated in columns 2 and 4 will be considered within the tolerance if no more than the accompanying number in columns 1 and 3 are found.

Number or Rate Found by Analysis (Found)	Number or Rate Stated on Label (Claimed)	Number or Rate Found by Analysis (Found)	Number or Rate Stated on Label (Claimed)
2	0	18	11
4	1	20	12
6	2	21	13
8	3	22	14
9	4	23	15
11	5	24	16
12	6	25	17
13	7	27	18
14	8	28	19
16	9	29	20
17	10	30	21

(4) SWEET CLOVER. White Blossom Sweet Clover seed containing 5 per cent or more of mottled seed shall not be labeled as White Blossom Sweet Clover seed but shall be labeled Sweet Clover Seed.

Ag 20.10 Fees. The fees for testing seed at the state seed laboratory shall be as follows:

Name of Seed	Purity Test Only	Germination Test Only	Purity and Germination Tests
(1) Small Grains, Vegetables and other large seeds:			
Oats	$ .50	$ .50	$ 1.00
Barley	.50	.50	1.00
Wheat	.50	.50	1.00
Rye	.50	.50	1.00
Sudan	.50	.50	1.00
Rape	.50	.50	1.00
Flax	.50	.50	1.00
Buckwheat	.50	.50	1.00
Cane	.50	.50	1.00
Soy Beans	.50	.50	1.00
Hemp	.50	.50	1.00
Corn	.50	.50	1.00
Peas	.50	.50	1.00
Beans	.50	.50	1.00
Popcorn	.50	.50	1.00
All vegetables (each)	.50	.50	1.00
(2) Small agricultural seeds:			
Red Clover	.75	.75	1.50
Alfalfa	.75	.75	1.50
Alsike	.75	.75	1.50
Sweetclover	.75	.75	1.50
White Clover	.75	.75	1.50
Ladino Clover	.75	.75	1.50
Timothy	.75	.75	1.50
Vetch	.75	.75	1.50
Trefoil	.75	.75	1.50
Millets	.75	.75	1.50
(3) Grasses:			
Brome	1.00	1.00	2.00
Reed Canary	1.00	1.00	2.00
Redtop	1.00	1.00	2.00
Fescues	1.00	1.00	2.00
Bluegrasses	1.00	1.00	2.00
Ryegrasses	1.00	1.00	2.00
Wheatgrasses	1.00	1.00	2.00
(4) Mixtures:			
For mixtures of 2 seed components both of which are grains, vegetables or large seeds	1.00	1.00	2.00
For mixtures of 2 seed components if either or both of such components are grass seeds or small agricultural seeds	1.50	1.50	3.00
For mixtures of 3 or more seed components of any kind	2.00	2.00	4.00

(5) Extraordinary or unusual samples:
The work of testing screenings, dirty samples and unusual seeds (including those of flowers, weeds and shrubs) will be performed on an actual cost basis to be estimated and quoted upon request after receipt of sample.

Ag 20.11 Standards of germination. Standards of germination for vegetable seeds shall be the same as those adopted by the U. S. department of agriculture for the administration of the federal seed act.

Artichoke	60%	Leek	60%
Asparagus	70%	Lettuce	80%
Beans (except Lima)	80%	Muskmelon	75%
Beans (Lima)	70%	Mustard	75%
Beets	65%	Okra	50%
Broccoli	75%	Onion	70%
Brussels sprouts	70%	Parsley	60%
Cabbage	75%	Parsnip	60%
Carrot	55%	Peas	80%
Cauliflower	75%	Pepper	55%
Celery and celeriac	55%	Pumpkin	75%
Chicory	65%	Radish	75%
Citron	65%	Rhubarb	60%
Collards	80%	Rutabaga	75%
Corn	75%	Salsify	75%
Cress, garden	40%	Spinach	60%
Cress, water	25%	Spinach (New Zealand)	40%
Cucumber	80%	Squash	75%
Egg Plant	60%	Swiss chard	65%
Endive	70%	Tomato	75%
Kale	75%	Turnip	80%
Kohlrabi	75%	Watermelon	70%