NEW YORK AGRICULTURAL EXPERIMENT STATION.

GENEVA, N. Y.

THE NEW YORK SEED LAW AND SEED TESTING.

M. T. MUNN.

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New York Agricultural Experiment Station, Geneva, N. Y.
The Bulletins published by the Station will be sent free to any farmer applying
for them.

*Connected with Grape Culture Investigations.
†Members of the faculty of the New York State College of Agriculture affiliated with this Station.
Farm seeds, the most variable, and, weight for weight, the most expensive material the farmer has to buy, can be purchased on and after July 1, 1920, with a complete tag or label attached to each sack, bag, or container showing the purity, germination, amount of weed seeds present, and the presence or absence of certain noxious weed seeds.

After considerable agitation New York has secured finally a law designed to protect the purchaser of seeds by giving him full information regarding the quality of the contemplated purchase; and, also, to protect the honest, legitimate dealer or seedsman against the practices of dishonest and irresponsible ones.

The New York "seed law," which became effective July 1, 1920, is primarily a labeling law in contradistinction to a grading law when grades are required. A copy of the law may be had upon application to the Commissioner of Agriculture, Albany, N. Y.

The main feature of the law

The law requires the labeling of all agricultural seeds which are sold, offered, or exposed for sale, within the State of New York, for seeding purposes within the State either in bulk, packages, bags, or other containers of 10 pounds or more with the exception of special mixtures, such as lawn mixtures, when 8 ounces is the minimum limit of weight.

Kinds of seeds to be labeled

The term "agricultural seeds," as defined in the law, includes practically every kind of seed planted upon New York farms. The following are designated as "agricultural seeds" and are subject to

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*The complete edition, containing the rules for seed testing, may be had upon application.
all the provisions of the seed law when sold for seeding purposes: Canada bluegrass, Kentucky bluegrass, orchard grass, reedtop, timothy, brome grass, fescues, millets, tall meadow oat grass, Italian rye grass, kafir corn, perennial rye grass, sorghum, sudan grass, and other grasses; alfalfa, alsike clover, crimson clover, red clover, white clover, sweet clover, vetches, rape, and flax; and buckwheat, barley, corn, oats, rye, wheat, and other cereals.

SEED MIXTURES

All mixtures of alsike clover and timothy, alsike and white clover, reedtop and timothy, and alsike and red clover in lots of 10 pounds or more must be fully and completely labeled in the same manner as unmixed agricultural seeds.

Special mixtures of agricultural seeds, that is, mixtures which usually carry a number of different kinds of seeds, when in lots of 8 ounces or more must also be fully labeled except that the law does not require a statement of the germination percentage in the case of the special mixtures. However, the percentage of inert matter must be given.

In the case of both mixtures and special mixtures as defined above the law requires a statement to the effect that "such seed is a mixture;" and also, "the name and approximate percentage by weight of each kind of agricultural seed present" in excess of 5 per cent or more of the total mixture.

THE LABEL

The law requires each lot of seed to carry a statement, tag, or label giving the following information:

1. The commonly accepted name of such seed.—For example, Dwarf Essex rape, Canada bluegrass, and Kentucky bluegrass must be called such on the label since these are their commonly accepted names, and not simply rape and bluegrass. The kind of seed must, therefore, be indicated. Variety and sub-variety names are not required, but if named on the label, as the vendor may elect, they must be the true variety name, otherwise, the seed would be misbranded or falsely labeled. As an illustration, if a label reads "yellow sweet clover" the seed must be of that variety and not of another variety such as white sweet clover.
2. The approximate percentage, by weight, of purity.—A statement of purity shows the amount of crop seeds of the kind which the label indicates as compared with the amount of weed seeds and inert matter present and must be expressed in terms of percentage by weight. Purity, then, is one of the important factors which determines quality and consequently price.

3. The percentage of weed seeds.—The total amount of weed seeds, whether noxious, troublesome, or otherwise, expressed in terms of percentage, must be stated on the tag or label. The term “weed seeds” as defined in the law does not include the seeds of field crops which are listed in the law as “agricultural seeds.” Seeds of crop plants of agricultural value, which occur incidentally or thru natural infestation by ripening at the same time and being harvested with the crop and which occur in any sample of a given kind of seed, are known to seed analysts and the seed trade as “other crop seeds,” “foreign seeds,” “seeds of extraneous crop plants,” and “other crop seeds of agricultural value.” A distinction should be clearly made, therefore, between the accidental commercial seeds and weed seeds in a sample. The seed law does not require that the percentage of “other crop seeds” or of accidental commercial seeds be stated, nevertheless, it should be clearly understood that seed testing stations and laboratories in making purity tests of a lot of seed, do not, as a rule, separate and express in separate percentages the accidental commercial seeds and the weed seeds. It is often of great importance that the percentages of other crop seeds be given in distinction from weed seeds since, in many cases, they are of equal or greater value than the agricultural seed in which they occur.

4. The name of each kind of the seeds of noxious weeds.—The name of each kind of noxious weed present must be stated on the label when it occurs, either singly or collectively, in excess of 1 seed in each 5 grams (about one-sixth of an ounce) of small seeds such as timothy, clover, and alfalfa; of 1 seed in each 25 grams (about six-sevenths of an ounce) of millet, rape, and seeds of like size; and of 1 seed in each 100 grams (about 3½ ounces) of oats, wheat, vetch, and seeds of like size. The law designates four kinds of weeds as noxious in this State, viz. quack grass, wild mustards, Canada thistle, and dodders.

The sale of seeds containing these noxious weed seeds is not prohibited, but it is required that the label or tag show if they
are present, in order that the purchaser may avoid buying seeds containing them.

5. The percentage of germination together with the month and year when the test was made.—With respect to germination, the law requires that two very important facts be stated on the tag or label on all lots of seeds except "special mixtures." First, the percentage of germination or the percentage of seeds which are alive or viable and which will sprout or germinate within the normal number of days must be indicated. This is highly essential in determining the quality and actual value of the seed for seeding purposes since dead seed is worthless for planting and is deceptive in determining the amount of seed to use. Second, the date, that is, the month and year, when the test was made must be given. This second item is essential since the vitality of seeds decreases with age, and the purchaser can readily determine from the tag or label whether sufficient time has elapsed to materially affect the viability of the seed under normal storage conditions.

6. The full name and address of the vendor.—The label must also give the full name and address of the person who sells, offers, or exposes for sale such seeds.

LABELING MIXTURES

Mixtures of alsike clover and timothy, alsike and white clover, redtop and timothy, and alsike and red clover, when in lots of 10 pounds or more, must carry a tag or label giving essentially the same information required for the unmixed or regular run of agricultural seeds except that the tag must state that such seed is a mixture, and must also give the approximate percentage by weight of each kind of crop seed present in excess of 5 per cent of the total mixture. Also, each kind of the above-defined noxious weed seeds present in excess of .1 in each 15 grams of the mixture must be named.

LABELING SPECIAL MIXTURES

Special mixtures of seeds, such as golf, pasture, meadow, and lawn mixtures when sold, offered, or exposed for sale as mixtures, in packages or other containers of 8 ounces or more, must carry for each lot a tag or label stating (1) that such seed is a mixture,
(2) the name of each kind of "agricultural seed" present in the proportion of 5 per cent or more of the total mixture, (3) the total percentage of weed seeds, (4) the percentage by weight of inert matter such as chaff, sticks, broken stems, sand, etc., (5) the name of each kind of noxious weed, as defined on page 5, present in excess of 1 seed in each 15 grams of the mixture, and (6) the full name and address of the vendor of such mixture.

FORM AND POSITION OF LABEL

The law does not require any particular form of statement, tag, or label except that it must convey definite information plainly written or printed in the English language as set forth therein, and must be placed on the exterior of the container. If the container is a bag of seed, the label should appear on the outside of the bag; if it is a barrel, bin, box, or package, on the outside of the container. The intent of the law is to place the information given on the label concerning the quality of the seed in such a form and position that it is accessible to the purchaser so that he may determine at a glance, if he will, what the seed is and, therefore, buy on his own responsibility.

EXEMPTIONS FROM THE SEED LAW

In order that there may be no misunderstanding as to the exemptions from the provisions of the seed law, the text of the law regarding exemptions is hereby quoted in italics and followed by explanatory notes.

Section 344.—Exemptions. Agricultural seeds or mixtures of same shall be exempt from the provisions of this article:

1. When exposed for sale or sold for food or feeding purposes only.—No labels are required under the seed law when seeds are sold, offered, or exposed for sale for food or feeding purposes; however, just so soon as such seeds are sold, offered, or exposed for sale for seeding purposes on the land then the complete label must be attached.

2. When sold to be recleaned before being sold or exposed for sale for seeding purposes.—No labels are required when seeds are sold to elevator men, merchants, seed dealers, etc., to be recleaned before
being sold, offered, or exposed for sale for seeding purposes. In such cases the dealer or other person who reclaims the seed to put it into salable condition for planting purposes must have the lot tested and must completely label each parcel of 10 pounds or more before it is placed on sale or sold. In other words, any farmer can sell his seed stocks of his own growing to any merchant to be reclaims without the necessity of labels; however, as soon as he takes it from his farm or sends it by common carrier to another for seeding purposes, then he becomes a vendor, and both the seller and the seeds are subject to all the provisions of the seed law.

3. When held for the purpose of reclaiming.—When seeds are held in storage in any form or place for the express purpose of reclaiming no labels are required until they are reclaims, held for sale, offered for sale, or sold for seeding purposes, then such goods must have the required label information.

4. When such seeds consist of buckwheat, barley, corn, oats, rye, wheat, or other cereal sold by the grower thereof on his own premises and delivered to the vendee or his agent or representative personally on such premises.—The meaning and intent of this exemption is quite clear, making it possible for one farmer to sell his seed barley, buckwheat, corn, oats, rye, wheat, and other cereals (that is, those grasses which are grown for their grain, which is ground into flour) of his own growing, on his own premises, to a neighboring farmer or other person providing he personally delivers such seeds to the "vendee" (the buyer) on such premises, that is the premises of the grower. The farmer may be held responsible for any representations he may make regarding such seeds. It should be clearly understood that none of the grasses or clovers with smaller seeds and which are more apt to be fouled with weed seeds can be sold in this manner for planting directly on the land. [Furthermore, no farmer, grower, or any other person can legally sell, offer, or expose for sale seeds for seeding purposes either of his own growing or farmer-bought for delivery from his farm or premises, either personally, by agent, or by common carrier unless such lot of seed is less than 10 pounds in weight (8 ounces of special mixtures), or is sold to be reclamed, or is fully and completely tagged with the required label information.]
FARMERS NOT EXEMPTED FROM THE SEED LAW

Farmers are not exempt from the seed law except as provided for in subdivision 4 of the exemptions discussed on page 8. The farmer should not be and is not fully exempted from the provisions of the seed law when he offers for sale seeds which are intended to be used immediately for seeding or planting purposes without further cleaning. His seed stocks offered for sale for planting purposes, except as above exempted, are subject to inspection and retest the same as those of any vendor of seeds, and his premises are also subject to inspection by authorized persons when there is reason to believe that the provisions of the seed law are being violated. He has not asked to be exempted and does not care to be since he has need of a strict seed law every time he purchases seeds for planting, whether of a dealer or of a neighbor. Seed laws which fully exempt the farmer have been found unconstitutional in other states. The careful, thrifty farmer demands, and rightly so, all the information about his contemplated seed purchase that is required to be given by the seed law. If a farmer, who is the grower thereof, desires to sell certain kinds of seeds to a neighbor without any label or quality information, and both care to deal in that manner, then they alone are responsible, the one for obtaining full price value for his goods and the other for the noxious and troublesome weeds he may get along with seed of possibly low or unknown germination.

SEED INSPECTION AND LAW ENFORCEMENT

The seed law, being an article of the State agricultural law, provides for the unobstructed inspection of any lot of seed in any place or upon any premises, the authorized representatives or agents of the Commissioner of Agriculture having access at all reasonable hours to such premises. Samples of seeds, properly drawn according to the rules for sampling seeds, may be taken in duplicate for the express purpose of examination, analysis, or test. Such tests are reported to the Commissioner of Agriculture who is empowered to administer the law in case he has reason to believe that its provisions have been violated.
RESULTS OF TESTS MAY BE PUBLISHED

The law provides for the publication from time to time of the results of the analyses or tests of samples of seeds procured on the market. This is done in order that the purchaser may study and compare the seed dealers’ promises and performances from year to year. Additional information regarding the general condition of the quality of seeds and the seed trade may also be published with these reports if deemed necessary.

HOW A FARMER MAY SELL SEEDS

A farmer who is a grower of seeds and desires to sell them for seeding purposes may do so in a number of different ways.

1. He may sell any seeds to anyone, anywhere, for use for food without labels, or for seeding purposes when in less than 10-pound lots.

2. He may sell, ship, or deliver field seeds to any merchant or general market to be recleaned or graded before being offered for sale for seeding, just as he has always done.

3. He may sell buckwheat, barley, corn, oats, rye, and wheat seed or other cereal of his own growing to any person providing the seed is delivered personally to the buyer or his representative upon the premises of the grower.

4. He may sell any kind of seed for seeding purposes to anyone, anywhere, either to be delivered personally or shipped thru a common carrier providing he has either tested such seed, or has had a test made, as he should do, and has fully labeled each lot.

HOW A FARMER MAY BUY SEED

The law does not forbid any person from buying the cheapest and foulest seed upon the market or dead and trashy seed, if he cares to do so, nor does it shield him from his folly if he now buys seeds carelessly and without taking full advantage of the protection afforded by the seed law. Every lot of seed upon the market in this State must be fully labeled, and no farmer should accept such seed until he has made an examination of the statements on the tag or label. In case these statements are not given he should insist upon receiving such quality information as required by law and
should promptly report to the Commissioner of Agriculture at Albany any persons or dealers who are violating the seed law or ignoring its provisions.

The most important consideration which the farmer can possibly give to seed purchases is in the matter of the grade of seed. When a tag or label bears a statement that the seed is above 99 per cent pure, and since the farmer can find out, if he will, whether such a statement is true, he may be sure that he is buying fairly safely. However, when he buys seed which is labeled with a low percentage of purity, he may be certain that he is either buying dirt at seed prices, or else is getting a grand array of weed seeds which will most certainly bring him a huge expense bill in the form of eradication effort for years to come. Usually a low purity guaranty means cheap, but really costly, seed; and cheap seed, like cheap fertilizer, is always expensive. This is necessarily so since the competition on the seed market is so keen that seed grades are based very nearly on their actual value. There are no bargains in the seed market because cheap seed is cheap for the reason that it is poor in quality, and any farmer who buys cheap seed in order to save money is like the man who stops the hands of the clock to save time — there is no saving. Likewise, any farmer or grower who produces foul and dirty seed cannot expect a dealer to pay a high market price if he is forced to spend time and money in cleaning out dirt and inert matter, weed seeds, and the light trashy stuff that nearly always remains in seed when threshed.

Finally, the farmer should buy good seed of a desired and known kind or variety, fully and completely labeled. He should grasp the idea that purchased weed seeds and inert matter are highly expensive; furthermore, that buying "cheap seeds" carelessly, absolutely prevents one from having any control of the weeds upon the farm. On and after July 1, 1920, it will pay every New York farmer to buy his farm seeds of the local dealer, retailer, or State wholesaler, since they will sell their grades of seed under an honest and correct label as required by the State law. On the other hand, if a farmer sends outside the State for his seed he buys at his own peril because the out-state dealer sends seeds into this State under the freedom of interstate commerce and is immune to local prosecution except where contract of sale is made within the State. State laws
do not regulate interstate commerce, consequently the only protection for the farmer who sends for seeds outside the State is the reliability of the house with which he deals.

**PURCHASERS MAY HAVE SEEDS TESTED**

Anyone who purchases seeds for his own planting purposes may have them tested free of charge according to the rules and regulations for seed testing adopted by the Station officials as given on page 14. However, no person should send samples for testing until he is familiar with the rules for the sending of such samples. Since the seed law is primarily a labeling law it should be entirely possible for the purchaser to rely quite largely upon the label statements found upon the lots of seed in the hands of the local dealer or other persons favorably known to the purchaser. Plainly it should not be the function of the Station seed laboratory to be continually retesting labeled goods or recognized brands or lots of seeds found upon the market when there is no evidence to show that such label statements are incorrect, or where the date of the germination test does not show sufficient time to have elapsed to effect materially the germinative ability of the seeds.

If, in any case, the purchaser of seeds has good and sufficient reason to believe that the label markings are not true statements of facts concerning the seed, or that sufficient time, as shown by the date of the test, has elapsed to effect materially the viability of the seed, he may have them tested free of charge according to Rule 8, page 15.

Samples sent in for testing will be reported upon strictly in the order in which they are received. The report will include a statement of the purity of the sample, that is, it will give the percentage of pure seed, the percentage of weed seeds, the percentage and character of the inert matter, and the number per pound of crop seed of noxious weed seeds present.

The percentage of germination, or the number of seeds per 100 selected just as they come which will sprout in the normal number of days, will be stated on the report if a germination test is requested. The percentage of hard seeds, that is, those seeds which remain hard (having neither sprouted, swollen, nor decayed) at the end of the test period will also be given.
When it seems to the interest of the farmer or purchaser to do so, some additional remarks or comments as to the condition or quality of the seed will be made upon the report.

**PROVISIONS FOR SEED TESTS**

The seed law grants permission to the New York Agricultural Experiment Station at Geneva to establish and maintain a seed laboratory with necessary equipment, and to employ competent analysts to make analyses and tests of samples of seeds collected under the provisions of the seed law. Since 1905, this Station has made tests of seeds voluntarily and free of charge for farmers or purchasers of seed when the sample and the accompanying request for a test bore every evidence of being desired by the prospective sower of the seed. Samples in increasing numbers and to the extent of several hundred per year have been tested under this policy. It is to be hoped that farmers in increasing numbers will appreciate and will continue to take advantage of the facilities offered by the seed law in a provision for a seed testing laboratory where their seeds may be tested. Means and facilities have not been available with which to undertake testing for seed dealers and the general seed trade. Since 1912, when the first seed law was enacted in this State, samples collected officially from the open market have been analyzed at this Station as provided for in the law, however, no provision was made for the operation of a seed testing laboratory.

Provision is also made in the new law whereby any citizen of the State shall have the privilege of submitting to the seed laboratory at the New York Agricultural Experiment Station at Geneva, samples of agricultural seeds for test or analysis. This privilege is subject, however, to such rules and regulations as may be adopted by the Director and Board of Control of said Station. These officials are granted power to make such rules and regulations as may from time to time become necessary to protect the seed laboratory and to facilitate service for the greatest number of people by limiting the number of samples tested for any one individual in a given time, and also to fix the fee charged for making tests of samples other than those tested free of charge.

Rules and regulations adopted by the Director and Board of Control of the Station for the use of the seed testing laboratory
are given below. Unless these rules and regulations are strictly observed delay in testing will result, or the samples may receive no attention at all. No tests will be made for persons violating any of the regulations.

RULES AND REGULATIONS GOVERNING THE TESTING OF SEEDS FOR PURITY AND GERMINATION ¹

1. The kinds of seeds that will be tested are those specified in the Seed Law and, in addition, the seeds of garden and truck crop plants.

2. Samples to be tested should be drawn in such a way as to be fairly representative of the bulk lot of seed from which they are taken.

3. Only samples which are of sufficient size for taking a representative test-sample will be analyzed or tested. The minimum weight of seed forwarded for test should be approximately:
   (a) One ounce of grass seed of any kind or of white and alsike clover;
   (b) Two ounces of red and crimson clover, alfalfa, millet, flax, or seed of like size;
   (c) One-half pound of cereals or seed of like size.

4. Each sample must bear an identification mark, the name of the kind of seed, and the name and address of the sender. Also, it must be accompanied by a statement of what is desired — whether a purity test, a germination test, or both.

   Samples sent by mail or express must be fully prepaid and should be enclosed in stout containers which will insure their arrival unbroken.

   Address all samples and correspondence relating thereto to the Seed Laboratory, New York Agricultural Experiment Station, Geneva, N. Y.

5. The name of the Station, of the Seed Laboratory, or of a Station official must not be used for advertising purposes in connection with the report issued upon any sample of seed.

   The data on the report may be copied onto a tag or label for the purpose of a declaration of sale, but the party doing this thereby guarantees that the quality of the seed to which such label is attached equals that indicated by the label.

¹ Adopted by the Director and Board of Control of the New York Agricultural Experiment Station, June 1, 1920.
6. Samples of seed grown by residents of New York State for their own use will be tested free of charge. Such samples must be accompanied by a statement that the test is not desired for use in a declaration of sale or for purposes of labeling, but for guidance in planting.

7. For all tests the results of which are to be used for declarations of sale or for labeling purposes, a fee will be charged as follows: For purity tests of special mixtures and all grasses (except timothy and the cereal grains), one dollar each; for purity tests of timothy, cereal grains, and all other kinds of crop seeds (except grasses), fifty cents each; for all germination tests, twenty-five cents each. Remittance should be made by money order payable to the State of New York.

8. Only under special circumstances which seem to justify such analyses in order to check guarantees, will the Station make tests (other than the regular official tests) of labeled seeds offered for sale upon the market. Persons making request for such tests should state fully their reasons therefor and furnish the following information in addition to that required under paragraph 4:

(a) Name and address of the party offering the seed for sale;
(b) A complete copy of the label on the seed;
(c) The commonly accepted name of the seed, its variety, and place where grown, if known.

9. No more than five samples will be tested free for any one person in any calendar month, but such persons may have additional samples tested upon payment of the required fees. To avoid errors and consequent delays in testing, senders of samples should keep a record of their sendings.

10. No notice will be taken of samples which are unaccompanied either by a fee or the statement required for free-test samples as given in paragraph 6.