

POULTRY

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Grimm alfalfa generally, owing to the fact that seed offered and sold as Grimm is not always genuine Grimm seed. Forty dollars per hundred pounds for pure Grimm makes the cost of seed per acre six dollars. I think there is no doubt but that the value of an extra cutting in a single season would more than cover the additional cost of Grimm seed. These remarks are based on seedlings we made in 1910-1914 and 1915."

It is stated by several authorities that a saving may be made in using Grimm alfalfa by sowing less seed than is ordinarily required of common alfalfa. Eight or ten pounds of good Grimm alfalfa seed per acre sown in a good seed bed is sufficient to produce an excellent stand. Pure Grimm alfalfa seed may be bought from reputable seedsmen at \$40 to \$50 per hundred pounds. Farmers must take care in securing alfalfa seed of these hardy strains that they buy from reliable growers or dealers.

Commercial Varieties of Alfalfa

Professor D. A. Moore of the Wisconsin Experiment Station has not yet decided in favor of the "hardy cold-resistant strain produced in the northwestern states." In Bulletin No. 259 of the Wisconsin Experiment Station, he writes: "The comparative experiments are being conducted at the Alfalfa Station, and it is not yet possible to determine definitely the value of the seed. The best seed comes. Special alfalfa seed is often sold at high prices from 50 cents to one dollar and upwards. The various claims for the value of such prices are practically worthless, and it is best to avoid the purchase of the special alfalfa is more fully confirmed, to plant seed that has been sown." Professor Moore believes that the difference in hardiness, as is often asserted by farmers, is very small due to the fact that in such conditions, poor drainage, too much acid, and unsuitable seed bed.

As the writer has previously stated, there is no question but that the differing conditions of soil and seed should have much to do with the hardiness and vigor of the alfalfa crop, but the evidence is sufficient also to prove that there is a great difference in the hardiness of different strains or varieties of alfalfa when grown under identically the same soil and climatic conditions.

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Professor D. A. Moore of the Wisconsin Experiment Station has not yet decided in favor of the "hard cold-resistant-strain produced in northern states." In Bulletin No. 259 of the Wisconsin Experiment Station, he writes: "Comparative experiments are being conducted by the Alfalfa Board to determine definitely from where the best seed comes. Annual alfalfa seed is often sold at high prices of from 50 cents to one dollar a bushel, with extensive advertising campaigns. Such prices are practically prohibitive and it is best, until the value of the ancestral alfalfa is more fully determined, to plant good, moderate priced seed." Professor Moore believes that the difference in seed hardness, as often reported by farmers, is apparently due to a difference in soil conditions, poor drainage, too much acid, and unsuitable seed bed. The writer has previously stated that there is no question as to the outstanding conditions of soil and seed bed have much to do with the hardness and vigor of the alfalfa crop, but the evidence is sufficient also to prove that there is a great difference in the hardness of different strains of alfalfa. Alfalfa when grown under identically the same soil and climatic con-

Grimm Enthusiastically Endorsed.

On the other hand, Professor H. D. Truesdale of Iowa State College is very enthusiastic in endorsing the above conclusions in favor of Grimm alfalfa. In a letter dated May 31st, 1917, he states: "There are very definite advantages in growing Grimm alfalfa. In preference to other alfalfas and varieties. In the first place it is almost entirely hardy so that there is no danger of winter-killing. In the second place it may make four cuttings a year instead of three. It is a common variety with common variety. It does not consider it necessary to leave a cover on the ground to protect the alfalfa from winter-killing. The third advantage in growing Grimm is the fact that it makes a strong and vigorous growth late in the summer with the result that the alfalfa and other weeds are not nearly as troublesome. The fourth advantage is that it often makes a heavy crop of seed when the common alfalfas grown under the same conditions produce practically no seed at all."

As regards purity and cost of seeds Professor Hughes says: "In the past we have not felt safe in recommending

e. Commercial Varieties of Alfalfa.

The alfalfa plant shows a considerable range in cold resistance. In fact, there are several regional varieties of alfalfa. Some of the true strains will winter-kill in severe winters in the latitude of Kansas, while there are varieties which will survive the severe winters of North Dakota. Several strains range in hardiness between these two extremes. At the present time there are recognized in the United States nine fairly distinct commercial varieties of alfalfa, varying in their adaptations to climatic conditions, some giving the best results in the north and northwest while others succeed only in the south and southwest, where the winters are mild.

"Common alfalfa" includes all of the alfalfas that do not have distinct and uniform varietal characteristics. A large number of strains are beginning to be recognized in the common group. They are designated by the geographical name of the locality where grown, as Kansas-crown alfalfa, Montana-grown alfalfa, or by some term descriptive of the conditions under which the crop has been produced, such as dry-land alfalfa and irrigated alfalfa. Strains developed in the South usually produce larger yields than those produced in the northern states, but they are less hardy.

It appears that the hardest strains of alfalfa are usually of hybrid origin, commonly denoted as variegated alfalfa. The leading varieties are the Grimm, the Baltic, the Conaack, the Acclimatized Turkestan, Canadian variegated, and Sand Lucern. These varieties, with the exception of Sand Lucern, are more cold resistant and drought resistant than the other commercial strains or varieties, and are therefore recommended for sections where winter-killing is likely to occur.

(Editor's Note:—This article was prepared by Mr. Teneyok, Director of Agricultural Extension Department of the Emerson—Brantingham Implement Company, at the suggestion of President Brantingham, who last winter lost by freezing the major portion of a large field of alfalfa.)

A. C. McCulloch, B.S.A., an O.A.C. graduate who has for two years been an instructor in the Oregon State Agriculture College, has now returned to Canada to take a position as poultry specialist with the Department of Agriculture in New Brunswick. With his Canadian and United States experience, Mr. McCulloch is now well fitted to do good work for the poultry industry in the Maritime provinces.

Egg Laying Contest at Guelph

ANOTHER feature of the Guelph show this year, and one that attracted much attention, was an open flying competition. The contest was open to pens of five birds and lasted for six days—the duration of the fair. Prof. Graham had charge of the contest, and the feeding of most of the pens, and he made them lay in spite of the changed conditions and crowded conditions. Ten pens, all pure-bred birds, comprised the contest. Guelph, won first with Rhode Island Red pullets, scored 48 eggs laid. Perhaps Mr. Sutton had the advantage in that his birds were easily transported to the fair without the awkwardness of a railway journey. Other winners were as follows:—

Second, J. R. Stork, St. Catharines
Barred Rocks, 18 eggs, 36 points
Third, A. W. Piggott, Sulphide, Barred
Rocks, 17 eggs, 32.75 points; fourth,
Norfolk Specialty Farm, Glen Wil-
liams, Leghorns, 25.9 points. In fifth
and sixth places, R. E. Burton & Son,
Hamilton, and J. A. Gillett, Aymer,
each with 12 eggs each, but the former
won on weight of eggs.

Early Pullets vs. Old Hens

OR profitable early winter egg production the early hatched pullet is three times better than the late pullet, four times better than the yearling hen and 30 times better than the "aged" hen.

Yarby pullets are best for the winter. This has been demonstrated many times. The Poultry Division, Agricultural Experiment Station, has collected eggs for several years from the three months (November, December, January) only are taken into consideration. The relative profitableness of the four ages is as follows: The six winter months were considered. In contrast, would not be so striking. The winter months were just beginning and the late winter months were just ending when the experiment closed. However, if eggs alone are to be considered, it is better to feed birds in the winter months and to feed birds in the spring months. Even if desired for breeding it is a question if, with the high price of eggs, it is better to rely upon the late winter months and the early spring, rather than feed hens that will not produce, or only at a small profit. There is no excuse whatever for keeping hens that lay late pullets, whose eggs cost more than they are worth. It is about the same as breeders. This summary is of record, and it is over four years, and are taken from several of the farms of the year.

These figures show that early pullets (hatched before May 1st) produced eggs at a cost for feed of 18.3 cents. The late pullets (hatched after May 15th) at a cost of 56 cents. The year old hens at a cost of 78.2 cents, and for every dozen eggs laid the hens in the aged class the cost was \$5.42.

These facts should be emphasized: (1) That for profitable egg production birds should lay before February. (2) Early well matured birds are the only birds that may be expected to do this. (3) Late pullets will not pay to keep. (4) Eggs, hens are not profitable. (5) Hens have a good flock of early pullets for the time being depend upon for breeding. (6) It is a natural loss to keep birds that eat a dollar worth of feed to produce 50 cents worth of eggs.