

able Growers' Association. Subjoined is the list of prize winners.

GRAIN EXHIBIT.

Fall Wheat.—Division 3—1, G. R. Barrie, Galt; 2, W. Johnstone, Galt; 3, W. C. Shaw, Hespeler. Spring Wheat.—Div. 2—1, S. McMillan, Cobden; Div. 3—1, P. W. Boynton & Son, Dollar. Oats.—Div. 2—1, J. Mountjoy, Nestleton Sta.; 2, C. W. Noville, Napanee; 3, A. Beacock, Nestleton Sta.; Div. 3—1, R. McCowan, Scarboro; 2, R. T. Baty, Wilton Grove; 3, F. A. Clark, Headford.

Barley.—Div. 3—1, A. Morrison, Smithdale; 2, F. E. Wickham, Walter's Falls; 3, Foyston Bros, Minesing.

SHEAF EXHIBIT.

Fall Wheat.—Div. 3—1, W. C. Shaw, Hespeler; 2, G. R. Barrie, Galt; 3, W. Johnstone, Galt. Spring Wheat.—Div. 2—1, S. McMillan, Cobden; 2, A. McBride, Cobden; Div. 3—1, R. Frisby, Victoria Square; 2, Jas. A. Rennie, Milliken; 3, P. W. Boynton & Son, Dollar.

Oats.—Div. 1—1, A. Fraser, Brackenrig; Div. 2—1, J. D. McLennan, Lancaster; 2, A. A. McLennan, Lancaster; 3, C. J. H. Jordison, Mon-eagle Valley; Div. 3—1, R. McCowan, Scarboro; 2, Jos. W. Edgar, Gorrie; 3, R. T. Baty, Wilton Grove.

Barley.—Div. 2—1, T. Coyte, Port Hope; 2, H. A. Walker, Charlecot; 3, Urias Nelson, Demorestville, Div. 3—1, Geo. Simpson, Onondaga; 2, Jno. Hunter, Wyoming; 3, F. E. Wickham, Walter's Falls.

VEGETABLES.

Onions.—1, J. Elford, Humber Bay; 2, F. F. Reeves, Humber Bay; 3, Wallace Bros., Wood-bridge; 4, Chas. Morgan, Weston; 5, H. Coldray, City View, Ottawa; 6, H. Hachborn, Echo Place, Brantford; 7, R. Dengate, Ealing.

Tomatoes.—1, J. Elford, Humber Bay; 2, G. W. Bycroft, Byron; 3, Fuller Bros., Hopedale; 4, Wm. Trick, Ottawa South; 5, F. F. Reeves, Humber Bay; 6, E. G. Grummett, Echo Place, Brantford; 7, T. Delworth, Weston.

Celery.—1, P. A. Bell, Humber Bay; 2, F. F. Reeves, Humber Bay; 3, A. McInnes, London; 4, W. R. Trott, London West; 5, H. Hurrell, Humber Bay; 6, Jas. McConkie, Brantford; 7, R. C. Bushell, Kingston.

Low-grade Hairy Vetch Seed.

The United States Secretary of Agriculture has issued a warning to prospective purchasers of hairy vetch seed against certain lots of low grade which are now being offered by wholesalers to the smaller dealers.

The greater part of the hairy vetch seed used in the United States has thus far been imported from Europe. Among recent importations there are a number of seeds of low quality, containing from fifteen to eighty per cent. of hairy vetch seed, the balance being made up either of cultivated forms of spring vetch, which are not hardy in the Northern States and Canada, or of various species of wild vetches, of doubtful value for agricultural purposes. This low-grade seed is now being offered by American wholesalers to smaller dealers throughout the country and is thus being widely distributed.

The seed of hairy vetch is spherical, varying from 3-32 to 5-32 of an inch in diameter, with an average diameter of approximately  $\frac{1}{8}$  of an inch.

The seeds of the other vetches are more or less irregular in form, being lense-shaped or flattened at the ends where they were crowded together in the pod. They vary in size, some being smaller and others larger than hairy vetch. By spreading a small quantity of the mixed seed thinly on a piece of cardboard or other smooth surface, and tilting it slightly with a gentle shaking motion, the hairy vetch seeds, which are spherical, will roll off, leaving behind most of the seeds which are used as adulterants.

Hairy vetch seed is dull grayish-black with a greenish tinge when the seed is fresh, although this greenish tinge is not present in imported seed which is usually at least one year old when it is offered for sale in this country.

The seeds of the other vetches found mixed with hairy vetch seed vary greatly in color, some being light grey mottled with brown and black, some uniformly brown, and others glossier and blacker than hairy vetch.

The color of the crushed seeds is also an indication of the presence or absence of adulterants. The crushed seed of hairy vetch is a bright lemon-yellow in color.

The seeds which are used as adulterants of hairy vetch seed for the most part vary in color from a dark fawn to a reddish-orange or salmon color. If a small amount of seed is crushed the presence of any other color than bright lemon-yellow indicates the seed is adulterated.

If the seed is not spherical it is not hairy vetch.

If the seed is not uniformly a grayish-black color with a greenish tinge in fresh seed it is not hairy vetch.

If the inside of the broken seed is not lemon color it is not hairy vetch.

By a careful examination of any seed offered for sale with the above suggestions in mind, any one can be fairly sure of discovering the presence of adulterants. If there is still any doubt, samples should be submitted to the nearest experiment station or seed-testing laboratory for critical examination.

The Weather.

This wet weather sets one to thinking as to what is the meaning of it all anyway. Does it not seem a little strange that amid the general advance in all sciences easy and difficult, meteorologists and astronomers are unable to give us any data of a definite value as to what we may expect at the hands of Old Boreas or Old Sol or whatever presides over the Weather Department? Why is it that one summer is extremely dry and the next extremely wet? In our present state of knowledge it is easily credited to the direct interference of some spiritual being, good or bad, generally the former, yet to our forefathers occurred just as great mysteries which are now easily explained as natural phenomena. A year ago the sky would cloud up and have every appearance of rain, but all pass disappointingly away. This year it will clear off cool in the evening after a heavy rain, cloud up and rain again before morning. Yesterday the meteorological office predicted fine weather for to-day and it certainly seemed they would be right for once, yet we are having as steady a rain to-day as we had all season. There is one thing, however, they can "strike" pretty well and that is the direction and velocity of the wind, but that is not of very much importance to the farmer. Perhaps if there were a "weather" office erected in every county the farmer might get reliable information about the weather at least a day ahead, and if this be so, I doubt if the Government could do anything of more value to the farmer, as almost all farm operations depend upon the weather. Still if farmers didn't have the weather to speculate upon, they might soon become dummies for want of a suitable topic to open a conversation. At any rate, this wet season should be a source of consolation to the Reciprocity, who had his pet scheme nipped in the bud last September, for had it been otherwise no doubt he would have sowed half his farm to barley and had a lot of black and sprouted stuff on hand, for which there is no sale, instead of having it in the form of cheese, where it properly belongs. If you show him this statement no doubt he will tell you that sometimes two wrongs make a right, or that if reciprocity had been given we wouldn't have had such wet weather!

J. H. BURNS.

Note.—Unfortunately for theory, farmers in most localities got their barley housed before it spoiled, but have been badly caught with their oats, which were mostly sown for feed. While we do not see in the unusual harvest season of 1912 any sound argument for or against reciprocity, still if it is to be considered and if a lessened acreage of barley were sown as a result of reciprocity, oats being grown instead, the disadvantage on that score will be plain.—Editor.

Facts about Essex.

The latitude of Essex is the same as that of Southern France. Leamington, a most beautiful and flourishing town, lies further south than Rome, Italy, and possesses a more equable climate. All manner of semi-tropical fruits and flowers can be grown in Southern Essex. South Essex stands unsurpassed in the production of tobacco, tomatoes, onions and fruit. Tobacco frequently yields 2,000 lbs. per acre, while in many instances early tomatoes have given a return of from \$500 to \$1,000 from the same area. Despite the unusual cold and wet season over \$2,200 worth of early tomatoes have been produced from 3½ acres. From \$500 to \$750 is often realized from an acre of onions in the Pt. Pelee marsh lands. This section of reclaimed country is specially adapted to the growing of potatoes, onions, roots and celery, while the higher land further north is unequalled for vegetables and fruit, but especially peaches. Property has risen in value and is still rising, as evidenced by some sales made during the month of August. Following is an extract from a local paper:

10 acres, \$10,000, G. A. Brown.  
25 acres, \$12,000, C. Ledrow.  
15 acres, \$7,500, A. McLaghlan.  
26 acres, \$12,000, J. E. Johnson.  
5 acres, \$5,000, J. C. Ross.  
5 acres, \$2,000, E. Elsley.  
7 acres, \$5,000, C. Kenney.

These lots are located in the vicinity of Leamington. A. E.

Break Up the Old Pastures.

(O. A. C. Press Bulletin.)

Some of our most troublesome pests find their breeding-places in land that has been left for some years under grass. Wire worms and white grubs, which are often-times very destructive to crops of all kinds, increase and multiply in such places, where they feed upon the roots of the grass. Wire worms in their adult stage are known as Click Beetles, oblong, dull-colored creatures. White grubs turn into what are commonly called June bugs or May beetles. These worms take from two to three years to grow to maturity and during that long period they feed upon roots and are out of sight and out of reach. There is a popular idea that salt will kill these creatures, and the question is often asked, "How much salt should be used per acre?" Like many other popular superstitions, there is no virtue whatever in this material for the purpose. Enough salt to affect the grubs would completely prevent the growth of any vegetation and it is doubtful if any amount whatever would kill the insects. Many other substances have been tried, but so far without success. The remedy is, therefore, to break up the breeding places. This should be done by ploughing the grass fields deeply late in the fall in order to expose the grubs and their winter quarters to the frost and rain, and also to the various animals and birds which feed upon them. The safest crop to grow during the first year is peas. After that a hoed crop, preferably turnips, would be the safest; after the second year there will probably be no grubs left. During the first year any that there are in the ground would feed upon the sod that had been plowed under and would let the growing crop pretty well alone. To grow corn, grain, potatoes or mangels at the outset would be very risky indeed. Besides these two insects, old pasture lands, especially where the soil is dry, are productive breeding-places for grasshoppers, which spread from these fields to the crops. In the southern counties of Ontario bordering on Lake Erie, there is another serious pest which also breeds in old pastures where the soil is light or sandy. This is known as the Rose Chafer. The beetle appears usually in great swarms about the time the roses come into bloom and devours, not only these flowers, but all sorts of others that may be growing in the garden. The worst damage that it does is to the blossoms and young fruit of grape vines, of which it is particularly fond. These four serious insects, which are extremely difficult to control, may be greatly reduced in numbers, if not got rid of altogether, by a short rotation of crops and especially by keeping pastures not more than three years under grass.—C. J. S. Bethune, Ontario Agricultural College, Guelph

Hydro-Electric Farm Power.

In the presence of a gathering of 250 farmers at Cooksville, Peel Co., Ont., on August 28th, the first in an itinerant series of Hydro-Electric power farm demonstrations was given on the farm of J. M. Wright. Hon. Adam Beck of the Power Commission, Mrs. Beck, Hon. Jas. S. Duff, Ontario Minister of Agriculture, his deputy W. B. Roadhouse and assistant C. F. Bailey, B. S. A., were among those present. Mrs. Beck pressed the button that set the machine going that threshed Mr. Wright's crop of fall wheat. The outfit operates in several other sections where the power is available for farm operations. There is a station at Cooksville for the use of the farmers of Toronto township. The cost to the township will be \$40,000 payable in installments of \$5,000 annually. Half a horsepower of electricity is capable of furnishing power for lighting, light cooking, heating a small water tank, churning, turning the washer, and pumping water from a well. One horsepower, which may be subscribed for at \$30, is sufficient to operate all the machinery on the average farm that electricity may be applied to, excepting such work as heavy chopping and threshing. Hon. Mr. Beck announced that if enough farmers took the former, it should not cost \$100 each per year for lighting and all work.

With royalty for nearly a whole exhibition week all to itself, and a couple of thousand boy scouts and cadets as a military nucleus, Toronto's cup of bliss is well nigh overflowed.