

On the South Pacific coast where, owing to severe drought, very few of the cultivated grasses thrive, we find large areas of grain of different kinds grown for fodder. This system has one great advantage for this country; for if the crop of native hay proves to be abundant, the crop of grain sown for hay can be allowed to mature and harvested as a grain crop, the farmer can by this means largely control his supply of fodder. On the Experimental Farm this year twelve different mixtures of grain were sown for fodder; of these a mixture of oats and peas gave the best results, yielding three and three-quarter tons of dry fodder per acre, closely followed by barley and peas with three and a half tons. Wheat and peas gave three and a-quarter tons. These crops were easily cured and greedily eaten by both horses and cattle. Spring rye has given an early crop of two tons, but I do not consider the fodder from this plant equal to a mixture of oats and peas.

**Roots.**—Seven varieties of swedes, and ten varieties of white and yellow-fleshed turnips were tested during the past season, the best of the swedes gave over one thousand bushels per acre, and the grey stone yielded 1,300 bushels, mangel-wurzel gave 825 bushels and field carrots 381 bushels. It will be seen by the above yields that roots can be successfully grown here. One of our most promising green crops is that of rape and cole; this has done remarkably well with us this year; sown in rows three feet apart on June 3rd, it yielded in October thirty-three tons per acre. Cattle eat it greedily, and with us it has never tainted the milk when fed to cows. It is a very useful feed for keeping up the flow of milk after frost has injured the pasture.

#### Seedsmen's Catalogues.

From a number of catalogues sent us by leading seedsmen, we call attention to the following:—

That of Messrs. Steele Bros., & Co., Toronto, is large and nicely illustrated, containing much valuable information. In it they mention many new and useful varieties of seed grain. From a large number of grasses, we notice, as being among their most useful sorts, Meadow Fescue, a variety that does well in most soils, making excellent hay and is a good cropper. Their new oats, Steele's White Cave, which are not procurable from any other source, as they have purchased the entire stock, are undoubtedly one of the very best. From our own experience with them we recommend them to our readers with confidence. Their earliest history, as far as known, takes us to the County of Ontario, where, to our knowledge, they gave a yield of over 100 bushels per acre grown on a trial plot. Last year we sent out over 800 packages from this office to various parts of the Dominion, and in every instance where replies were received they were entirely satisfactory. Below are testimonials from leading farmers:—

GLANWORTH, ONT.

The White Cave Oats that I saw growing on the farm of Messrs. Shore Bros., White Oak, was the most promising I have seen during the past season, and should yield most abundantly. When I saw them shortly before harvest they had made a most vigorous growth, standing very thick on the ground, the straw being a good length and very bright and stiff. The crop was remarkably heavy, and was particularly attractive. They should prove a great acquisition, as the grain is thin in the skin and heavy.

W. S. HAWKSHAW, F. R. S.

COLUMBUS, ONT., Dec 6, 1890.

Dear Sirs,—I have carefully examined the White Cave Oats when growing in the field, and from reports and observations, I have concluded it is a very superior sort, being a heavy yield. The straw and grain are most desirable. Yours truly,

WM. SMITH, M. P.

See article entitled "What Our Seedsmen Write Us" for further testimonials.

Messrs. Steele Bros. offer a prize of \$10 to the party growing the largest crop from five pounds of this sort grown from seed purchased from them.

This firm also offer a new spring wheat, Campbell's White Chaff, a sample of which we have examined. It is exceedingly fine. The introducers speak of it as follows:—

This remarkable new variety has now been grown in Canada for several years, and has proved itself admirably adapted to our climate. It originated in Imcoe County, one of our finest wheat growing districts. Mr. David Campbell, the originator, selected it eleven years ago; for some years it changed somewhat in character, but the type has now become fixed. We have secured the whole stock of this grand new spring wheat, and feel that we are offering a wheat that will give our customers the greatest satisfaction. Campbell's White Chaff is a bald wheat, club shaped, with a compact and rather heavy head, well filled to the top, and is

a very good, thrifty grower, stooling profusely, for which reason five pecks of seed is quite sufficient for an acre. It grows a strong straw from 2½ to 3 feet high, and of a deep green color which it maintains till ripening; matures from ten days to two weeks earlier than other standard varieties. The grain is white, thin-skinned, and very plump. As the supply of Campbell's White Chaff Wheat is limited, we advise early orders, as we cannot fill any orders after the stock set apart for sale this season is exhausted, and we advise every person who wants to make the most money raising wheat to get a start this season. We claim that this is one of the earliest spring wheats grown.

Prof. Saunders writes from Experimental Farm, Ottawa, December 29th, 1890:—

GENTS.—We have had two years' experience with Campbell's White Chaff, and it has yielded the heaviest crop of any of our spring wheats. Last year the crop was 36½ bush., when our best crop of any other variety was 30 bush. I have examined this grain very closely for the past two years in all stages of its growth, and I think it is the most promising spring wheat for Ontario in the east we have handled.

JOHN A. BRUCE & CO., Hamilton, Ont., offer seed grown from new varieties of oats introduced by them from the north of Europe, which they claim have proven exceedingly satisfactory. These comprise: Giant Swedish (slide), obtained from Sweden. Although of recent introduction there it is largely grown; Holstein Prolific, from the shore of the Baltic Sea, a white variety, with large, branching, open head, and an early sort; Early Archangel, from the extreme north of Russia, which they claim is the earliest variety in cultivation, and possessing the desirable characteristics of having long, bright, stiff straw, and plump, heavy, white grain, of excellent feeding quality.

WM. EVANS, Montreal, whose extensive experience and long business career in the seed line should enable him to select those kinds which are the best, issues this year his thirty-sixth annual descriptive catalogue, which contains a very extensive and complete list of agricultural grasses and cereals of merit. Evans' Improved Pea Bean is claimed to be a decided improvement on the old standard pea bean, in both earliness and productiveness, being an upright grower and heavy bearer, and ten or fifteen days earlier than the old sort.

D. M. FERRY & CO., Windsor, send a fine catalogue with many useful hints to practical people. One of their specialties is the Japanese Buckwheat, a variety of vigorous growth, early maturity, and very large grain of good quality, with thin hull.

WM. RENNIE, Toronto, also has a beautifully illustrated and fine catalogue. Their list of spring grains is very complete, including very many of the leading kinds of spring wheat, barley, oats, peas and buckwheat. He has Chevalier Two-Rowed barley, both imported and that grown from imported seed, as well as the leading six-rowed varieties.

SAMUEL WILSON, Mechanicsville, Pa., whose artistic and handsome catalogue, among other cereals mentioned, directs especial attention to Okanagan Valley spring wheat, a sort originally from British Columbia, as one of high merit, and also Wilson's Prolific Side Oats, which, he says, produce large quantities per acre of grain, weighing from 40 to 45 pounds per bushel in ordinary seasons.

JOHN H. SALZER, La Crosse, Wis., whose catalogue is an exceptionally fine one, is replete with illustrations of grain and grasses, showing their manner of growth, and description of habits, yields and relative usefulness. Among the many sorts mentioned, we will only call attention to Salzer's California Prolific barley, which, from description and cut, appears to be an immense yielder, with very little beard, and grain of the largest size.

GEORGE KEITH, Toronto, is among the leading and most reliable seedsmen of Canada. His catalogue, although not of such an elaborate character as some, at once attracts attention by its neat appearance, and, on examination, is found to confirm the impression, at first formed, of usefulness, its suggestions regarding culture being very instructive. The list of agricultural grasses and seed grains, comprising wheat, oats, rye, barley and buckwheat, is complete, and cannot fail to be appreciated by the enterprising farmer.

MID-CONTINENTAL NURSERIES, Fairbury, Neb., whose catalogue contains a very complete list of trees, shrubs, vines and plants, both fruiting and ornamental, and who, from the locality of their nurseries, should be able to furnish the most hardy growers, also furnish a neat little instruction book for transplanting and culture of the different kinds which they grow, that will be very useful and a benefit to those who receive it.

THE GERMAN NURSERIES, Bower, Neb., of which Mr. Carl Londerregger is proprietor, are also operating in a latitude which should be able to supply the western provinces of Canada with hardy fruit and ornamental trees, shrubs and plants. His price list contains an extensive list from which to select at regular prices.

CHAS. W. BUTTERFIELD, Bellows Falls, Vt., whose catalogue is to hand, contains an extensive list of plants, seeds, cuttings, etc., comprising many selections of merit.

Besides the above there are among our advertisers Robert Evans, Hamilton; William Ewing, Montreal; and E. D. Smith, Winona, Ont., whose catalogues have not come to hand, but which would, no doubt, be sent free to any person applying, as well as the others whose names appear above. We advise our readers to write to each of these gentlemen for their catalogues.

#### Seed Testing at the Experimental Farm vs. at Home.

BY JOHN SEABURY.

I notice that you gave the article on testing seeds by Prof. Saunders a place in your number, and as your columns are open for discussion, I ask you to give the following a place also. To my mind this seed question is becoming monotonous and threadbare, and I think the Professor is making a great mistake in taking up the question in this way. My idea of an Experimental station is that it should be an educator of the farmers and people by giving them such information and instruction as will help them and teach them to be better farmers, better experts in their business, and above all to depend on themselves and not on the government for assistance to do the most simple and easiest of experiments and tests, viz., that of testing seeds. Why don't the Professor issue a bulletin and tell the farmers how to do this in their own homes and in their own kitchens. Can the teacher teach his scholars how to read by reading to them? Neither can Prof. Saunders teach farmers how to do this work by sending their samples to Ottawa to be tested. To me it looks childish and ridiculous to ask farmers to send their samples to Ottawa, when they can test them quite as well at home; and even, if not quite so well, it is an educator and instructor, and will be a step in the direction of awakening an interest in this class of work, and this is just the point, and a very important point. Farmers do not, as a class, take enough interest in the details of farm work, and if this interest can be awakened in any way, a good work will have been begun.

Many will say "how can farmers test their own seeds?" Nothing is easier. Take a few small flower pots, or, what is better, some shallow boxes similar to those used by gardeners for setting tomato plants in, and count out one hundred seeds of each variety, and put them in this box, first filling it with nice, clean, good soil—something soft and friable that won't bake or dry too quickly. Clean sand is better than a stiff hard soil. A box 12 x 6 will hold 12 to 18 samples of 100 seeds each of any ordinary variety of garden seeds. Keep this box warm and moist, and watch the growth, and when nicely sprouted count out the number grown, and that will give you the per cent. For instance, if 85 out of the 100 grew, then 85% is the growth of that sample. Should one test on any one sample tested not grow satisfactory, try it again. Don't condemn with one trial, for I have known the second test to be often entirely different from the first, and more satisfactory. Farmers will find this a most interesting and instructive work, and one that everyone should be familiar with, for I venture to say were they more familiar with the germination and growth of seeds, and the beautiful, delicate, sensitive things these young and tender plants are, they would be more considerate and give them a much better seed bed, and by so doing enhance the value and chances of their crops fifty per cent. Before closing I would call the attention of your readers to the article that appeared in the February number of your paper on seeds, page 51, viz.:—"Reply to our seedsmen and some needed reforms." The hints and instructions there given, with my feeble remarks, will, I think, enable any man of ordinary intelligence to test his own seeds, and if he does not succeed just as well as he might wish at the first time, by persevering he will soon be able to do this work to his perfect satisfaction.