

ripe. If the cornstalks are to be saved for fodder, it will be best to cut them up by the bottom as soon as the ears become well glazed but not quite ripe, and set a dozen hills together in a shock to cure the stalks, and allow the grain to dry and harden. The old practice of topping the corn has been found to be injurious, and to greatly diminish the yield, so that it is rarely now indulged in, unless by some one who never takes any interest in the agricultural progress of the age.

Husking may be done at any time during the dry autumn days, as frost does not hurt the corn or cornstalks after they are ripe, and if the fodder is to be housed for winter, it must be thoroughly dried to prevent its becoming heated and mouldy.

Hints to Wheat Growers.

Hon. Horace Capron, the United States Commissioner of Agriculture, in a letter to Hon. B. C. Cook, of the National House of Representatives, gives some hints on wheat growing, which should be considered and acted upon by every grower of that cereal.

1. DETERIORATION FROM IMPERFECT SEED.

—Regard must be had to pedigree in wheat, as in cattle or horses, or deterioration is sure to result. Among wild herds, the prevailing law of the strongest aids in preserving its average excellence, but the prevalent neglect of the selection of seed of cereals is a sure means of degeneracy. Seed is generally taken at random, often an inferior and imperfect quality, because No. 1 wheat commands a higher price in market. Like produces like, and this shrivelled grain tends to slow growth in the plant, to late ripening, and consequently greater risk of insect ravages; it is immature and lacking in vitality, and decreased plumpness and diminished weight may be expected in the harvest; it may have germs of mildew affecting it, with insufficient vitality to resist the attacks of fungoid enemies.

2. DETERIORATION BY IN-AND-IN BREEDING.—The use of the same seed year after year undoubtedly tends to deterioration, on the well-known principle holding in animal reproduction.

3. NEGLECT OF ROTATION IN CROPS.—On the richest wheat soils, with continued cropping, even with change of seed and careful selection, a diminished yield is usually apparent after the second crop. Illinois, Minnesota, California, Australia—every famous wheat section known—attests the certainty and rapidity of decreased production under a practice which disregards rotation.

4. DEFICIENT AND CARELESS CULTIVATION.—As a rule, the only preparation for seeding is a slight scratching of the soil, sometimes only a harrowing of the weedy, grassy, uneven surface from which corn has just been cut, and weeds have thus an equal or superior opportunity for growth, and eventually

smother and dwarf the wheat, furnishing a prolific cause for deterioration.

The wheat plant is susceptible of great improvement if the same judgment and care are exercised as are exhibited by successful breeders of farm animals. It will also degenerate with wonderful facility under the average management of pioneer wheat-growers. After this careless culture becomes unprofitable, and probably not until then, will the requisite means of improvement be used.

The Sea Kale Beet, or Silver Beet.

Each year, as it progresses, forces on the attention of all persons engaged in, or observant of agriculture, that our crops are growing less and less annually, and that, instead of an increase in agricultural prosperity, taken as a whole, there is a considerable decrease. This fact all observant persons trace to the want of the turnip crop, or some equivalent for it. The improvement that has taken place in British agriculture has been entirely dependent on the turnip crop, and at the present time throughout Britain one-fourth of every farm is now devoted each year to turnips.

A Scotch farmer remarked to the writer a few weeks since, "I shall miss the turnips. I farmed one thousand acres of land in Scotland, and each year grew and fed two hundred and fifty acres of turnips. I must find some substitute here, for they tell me if I grow from five to ten acres of turnips it is as much as I can do." On explaining our system of bare fallows, with its attendant evils, he remarked, "Well, that may do for a time, but it is taking all out, and putting none back, and the end must come." He strongly condemned the usual course of Canadian farming, and it was only after the discussion had shown him the high price of labour, and the low prices of produce—so different from those he had been used to—that he could for a moment allow that our system could produce a profitable return at all.

A Norfolk (Canada) farmer, with whom the writer discussed the same subject—and he was a man who had been bred up in the United States and Canada—also admitted that we need not expect good crops from ordinary Canadian farming; but said he, "I have no cause to complain, for my crops are always good." His procedure is to sow clover with his wheat, take a crop of hay from the resulting grass, plough down the sod late in the fall, harrow the stale furrow well in the spring, and sow white turnips. These grow without hoeing until the ground is well covered, and he finds them smother most of the weeds. He ploughs them under in September, and again sows wheat with the best results. If the turnips have grown strong and thick, so as to kill the weeds, and the time promises well for barley, he lets the turnips grow till the season for fall ploughing arrives, then turns them under. They rot well before spring, and leave the land in the

most splendid condition for barley. The result has always been a heavy crop. He seeds down the barley with clover, takes an early crop of hay, ploughs down the second growth for fall wheat, or if the land requires it, he ploughs under the first crop of clover, as soon as it is well in bloom, and then prepares for fall wheat. He says this course leaves the land clean, and that it is on the mend all the time. When he finds it advisable, he sows and ploughs under peas instead of turnips. But the great complaint is that no kind of turnip can grow its best until the heavy dews and cool nights of autumn produce sufficient moisture in the soil, and supply the plant with enough moisture on the leaves, to ensure a rapid increase both in the root and the leaf.

It is to meet this difficulty that the following suggestion is made:

The Silver Beet, as some call it, or the Sea-kale Beet, as others call it, is a kind of beet which does not form a large root like mangel wurzel, but it throws up an immense quantity of large and succulent leaves. Those leaves have the centre rib very large, and of a beautiful clear silver white, and when the green part of the leaves has been stripped off, it forms a kitchen garden vegetable quite equal to sea-kale. It boils soft, and is an elegant-looking dish, and to those who like that kind of thing, is delicious. It is eaten with melted butter, and pepper and salt, like sea-kale, and is certainly very wholesome.

The root is entirely under the soil; it is large and fleshy, spreads off into a great number of branches under the ground, with a large mass of fibres in every direction, so that when dug up, the clump is as large as a half gallon measure. Meantime, the hotter the weather, the better it grows; the mass of leaves is very large, covers and keeps the ground moist, and is a perfect smotherer to all weeds, and so it continues to grow till the frost comes.

It grows close in the row, and can be kept clean with the horse hoe. The writer had the largest part of those grown by him last summer fed to the cows, and the ground certainly produced a monstrous mass of feed, of which the cows were very fond, and it agreed well with them. A few roots were left in the ground to see the effect of winter on them, and they have now been examined, and the result is—the dead and decayed leaves fairly cover the ground, the roots are thoroughly killed by the frost, and turned into masses of manure. Roots and leaves together are certainly equal to from thirty to forty loads of manure per acre, and the result must be most enriching.

The plant seems to be an original or wild variety, apparently a species of beet in its natural state, before the efforts of mankind had improved the root. It is certainly much hardier than either beet or mangel, stands the drought well, affords excellent feed where green feed is wanted, and the