

### German Amber Wheat and other Varieties.

The German Amber is a smooth or beardless, red chaff wheat imported from Germany, where it is still largely cultivated.

It produces in this country a medium sized head containing about forty grains, and is classed among the best red chaff smooth wheats. The spike is compact and generally square and erect, the apex slightly compressed with a few short awns at the end of the spike. The spikelets generally all fruit, the seed is oblong, ventricose, truncate, mealy and farinaceous, the bran thin, and the wheat highly prized for flour. There are several sub-varieties of this wheat differing very little from the original, either as to early ripening or hardiness. The German Amber makes larger spikes, and will yield more seed to an acre, but in other respects differs but little. When well matured it weighs fully sixty-two pounds to a bushel. Its desirable qualities are hardiness, early ripening, and its capacity, so to speak, to produce a reasonably good crop on but moderately fertile soil. The first secures it against the severity of winter, and the second against the attacks of the midge and Hessian fly. It ripens a stiff, healthy straw, and is rarely attacked by rust. Though it will produce a good crop on poorer soil than almost any other wheat, it is no less indifferent to first-rate soil and cultivation than any other, and yields accordingly. It ripens from the twentieth day of June to the fifth day of July, according to the locality and climate. It may be laid down as a general rule that the red chaff varieties of wheat are the hardest, and this may be classed among the first in this respect, yielding a medium and sure crop each year. Experience also verifies the statement that red wheats succeed better on soils only moderately productive than white wheats. But in rich, loamy soils, white wheats are to be preferred, the yield being quite as large as that of the red wheat and the market price always much better.

Whether it is desirable to cultivate many or few varieties of wheat at the same time on a farm may be regarded differently by different persons. We think three or four varieties sufficient, as rendering partial success more certain and total failure less probable. The productiveness of any one variety of wheat differs from year to year, owing to different conditions of climate, season and soil, during the active period of the plant's growth, and while one variety fails another may succeed. Thus in a very dry season the long straw varieties are most productive, while in a wet season, the plant growing very luxuriously, the shorter varieties succeed best. By reason of these irregularities it is both prudent and necessary to succeed to cultivate several varieties at the same time on a farm. Every farmer should ascertain by experiment for himself what varieties are best suited to his particular soils and circumstances. But a blind preference for any kind of wheat, because it has been successfully cultivated for a long time in one's neighborhood, without testing its worth with other varieties, is to be deprecated and condemned as much as a constant shifting year after year from one new kind to another, in the vain hope of finding a variety that will cast all others into the shade. It has too much been the custom to sow a particular wheat in the same locality for a long time, and prefer it to all others. This is a sure way to cause the best variety to degenerate and become worthless. The cause of this degeneracy should be sought for less in the seed itself than in the treatment to which it has been subjected. Except on the richest and best cultivated soils, and under the most favorable climate, no variety of wheat can be long cultivated without manifesting signs of degeneracy. This arises from the imperceptible but certain decay of the organs of vitality in consequence of imperfect development, and, in unfavorable seasons, of fundamental derangement, and even of specific organic disease itself. The only remedy lies in a systematic change of seed

from a different locality. But as this cannot always be effected without at the same time changing the variety or kind, the farmer should strive to get that which is hardy and vigorous and will suit his soil. A good plan is to try and regenerate or restore his own worn out or degenerated variety, as one best suited to his particular locality. This can be done by shifting the seed to another part of the country, and growing it on a different soil for a few years. When brought back it will be found to be greatly improved by the change, and to have regained its original vigor and hardiness.

Farmers should strive to select the largest and best formed heads for seed, and give to them the best garden cultivation. In this way they are enabled to maintain the vigor and purity of the seed, and also to restore them to health and vigor when lost by careless cultivation.

There is no doubt that many varieties which bear new names are only the purest and best of the old varieties restored to health and hardiness by judicious cultivation.—Careful attention to the variety and quality of the seed is essential to success in raising wheat, and even the profitless results of indifferent cultivation may be repaired by securing good seed, adapted to the soil, and obtained from a different and more favorable locality. Soil of a firm texture, naturally productive, and in a good state of cultivation, will always, in favorable circumstances, produce the best varieties of wheat.—*Experimental Journal.*

### THE DRINK OF PLANTS

The use of manure-water is a matter of profoundest importance, and every point connected therewith should be canvassed freely and without prejudice. Long and careful observation has convinced us (GARDENER'S MAGAZINE) that the customary directions of the books are false in principle and injurious in practice. It is customary to say, "Give a strong dose at such a time, then pure water only, then another strong dose," and so on. It is quite true that some of our favorites endure such treatment without visible injury, but we feel persuaded that the results would be far more satisfactory were the plants, needing extra nourishment, supplied with weak manure water constantly instead of with strong doses at intervals. A little calm consideration of the manner in which plants take up and assimilate their food must surely tend to the conclusion that strong doses of liquid manure approximate very nearly to strong doses of poison; at all events, accidents resulting from such practice are by no means uncommon, and there are probably many more accidents of the kind than are heard of beyond the gardens in which they occur. We have never seen more satisfactory growth than in cases where the only water obtainable was constantly charged with manure; yet the liquid was so far from being what we call "strong" that there was no indication to the senses of the peculiar properties of the fluid. Manure may be given in this weak state to almost any and every plant in cultivation with safety and benefit, and the constant use of such fluid has a far more satisfactory effect in the end than the adoption of a stronger solution for a season only. We must not be understood as advocating what are sarcastically termed "homoeopathic" doses; infinitesimal quantities need not be thought of. We simply urge that liquid manure may be so weak that seedling plants and newly-potted plants may be watered with it safely, yet so far strong enough that by its constant use the plants subjected to its influence will attain in the end a far higher degree of perfection than

can be insured by the orthodox of any other method of artificial stimulus.

### CANNING FRUIT.

A friend has handed us the following directions for canning fruits, specifying the length of time of boiling and the amount of sugar per quart of fruit that should be used, and requests us to publish the same, as he regards them valuable. He obtained the circular of some Fruit Jar manufacturer or dealer:—"Boil Cherries moderately, 8 minutes; Raspberries, 10 minutes; Blackberries, 10 minutes; Plumbs, 12 minutes; Strawberries, 12 minutes; Whortleberries, 10 minutes; Pie Plant, sliced, 15 minutes; Small sized Pears, whole, 30 minutes; Bartlett Pears, in halves, 20 minutes; Peaches, in halves, 10 minutes; Peaches, whole, 20 minutes; Pine Apple, sliced  $\frac{1}{2}$  inch thick, 15 minutes; Siberian or Crab Apple, whole, 25 minutes; Sour Apples, quartered, 15 minutes; Ripe Currants, 10 minutes; Wild Grapes, 15 minutes. The amount of sugar to a quart jar should be:—For Cherries, 6 ounces; Raspberries, 6 ounces; Lawton Blackberries, 8 ounces; Field Blackberries, 6 ounces; Strawberries, 8 ounces; Whortleberries, 5 ounces; Small Sour Pears, whole, 8 ounces; Wild Grapes, 8 ounces; Bartlett Pears, 6 ounces; Peaches, 6 ounces; Pine Apples, 8 ounces; Siberian or Crab Apples, 8 ounces; Plumbs, 8 ounces; Pie Plant, 10 ounces; Sour Apples, quartered, 8 ounces; Ripe Currants, 8 ounces; Quince, 10 ounces."

### FOUNDERING HORSES.

A certain cure for founder in a horse is to stand him in water up to his belly. I have known it practiced for fifty years; and swathing the legs in hot water, vinegar and sugar of lead are all good to some extent; but a founder must be relieved suddenly, or the horse will show stiffness in his action and have deformed and callous or tender hoofs.

Water applied to the legs I do not consider a positive cure; the disease must be attacked at the root, by bleeding and purging, a few drops of blood taken from below the fetlocks will hasten his recovery. But the most certain and quick remedy that I have ever known is a green gourd. Take a large green gourd, cut it up; put it into a gallon of water and boil it down to a quart. Strain the liquid and drench—in twenty-four hours the horse will be perfectly himself. The gourd is a powerful diuretic, and will cause the horse to stale the most offensive odor.

In 1822, I traded for two fine young mares in Augusta, Ga. I rode one of them to Kentucky and my servant the other. Early one morning, at the crossing of Clinch river, Tenn. we found one of the mares so badly foundered that she could not be led out of the stable. I procured a green gourd and drenched her as directed above, and directed the servant to remain until she was able to travel, expecting that he would reach home three or four days after me; the next day after my arrival he came in, with the mare in as good plight as if nothing had happened.—*COR. RURAL WORLD.*

Onions, one year with another, are as profitable a crop as can be raised on small places where rotted manure, clean soil and plenty of labor can be had. Somehow the market is hardly ever well supplied with them.