

quite sufficient, say five pecks to the acre if sown broadcast, and three if drilled in. This, however, is rather less than would satisfy us, as we are not advocates of such thin seeding as now seems to be coming into fashion, especially in Britain. After the 5th September it is better to increase the amount of seed, say a peck per acre for each extra ten days of lateness till the amount reaches two bushels. Something will depend on the season, the soil, and the variety of wheat to be grown, and those who understand the matter know how to gauge their practice by the results of the experience obtained on their own farms.

The manner of sowing the seed is of importance, and also varies with circumstances. Broadcast sowing is probably the best where the wheat is sown early on well prepared soils, admitting of the seed being properly covered to a moderate depth, and the seeding is done by an experienced hand. But this cannot often be done, and to ensure a certainty of the seed being properly applied to the soil and covered in, drilling comes to the help of the farmer. The later the seed is sown the more necessary becomes the use of the drill, and no farmer of means should be without one. In sowing broadcast, it is better to sow on the land just as it is turned over by the plough, without any previous harrowing. Then harrow lengthwise and crosswise, but do not roll. When a drill is used, the land can be made tolerably smooth with the harrows before the drilling is done. The little ridges left by the drill machine are of great use afterwards in helping to prevent heaving by frosts; as the wheat, growing as it does in the depressed lines made by the drill, is gradually covered by the action of rain and frost in crumbling down the ridges. Be sure to brine or lime the seed before sowing, if it is desired to guard against smut.

Salt has been tried as a manure on winter wheat with good effect, increasing the growth and early maturity of the plants. Sow a barrel per acre just before sowing the wheat. We do not believe there is any real manurial value in salt, but it doubtless acts as a solvent of the mineral plant food contained in the soil. It would not be beneficial in all cases, but its application can do no harm, and the richer the soil the more likely would the salt be to prove valuable. It is now cheap and easily obtained, and every intelligent farmer should at least try what effect the use of salt produces on his soil, and in this way much may be learned by experience as to the advisability of applying it, and to what soils and under what circumstances it will pay to use it.

In another article we hope to give something further about varieties of winter wheat, and how they can best be adapted to particular sections and soils. To this end we shall await the results of the harvest now commencing.

Growing Clover.

There are some matters connected with the growing of clover that are scarcely sufficiently attended to, and need reiterated notice. In the first place, the importance of having only perfectly good, sound seed, cannot be too strongly impressed on our farmers. In a case like this, where, from the high expense of the seed, the generality of farmers are only too apt and willing to err on the side of economy, by giving a light seeding as they think can be made to *take*, it is not to be wondered at if many failures arise from a deficiency in the quality of the seed. In selecting the seed, that which is ripest (which is shown by the greater prevalence of dark colours among the grains) is to be preferred; and according as the seed is light in colour an extra allowance should be made at seeding time. If in one hundred grains there are fifty light, over fifty per cent. should be added to the amount to be sown per acre, and so on in proportion to the deficiency of dark seeds in the sample. The light seeds being generally immature and unripe, usually fail to grow. Good seed is of the first importance in this crop, where so many adverse influences have to be contended against.

Then again, farmers usually depend on red clover alone, when if the matter of growing clover were properly understood, it would be found more advantageous to sow a mixture of different sorts, say one-half of red, one-quarter alsike, and the remainder of the large and small white sorts.

In sowing the seed, it is of importance that it should be evenly distributed over the land, a thing that can only be done where the operation of sowing is entrusted to a thoroughly reliable and experienced hand. A patch here and there, a little thicker than the rest, not only looks unsightly, but also makes the crop a very uneven one at haying-time. We often see fields of clover that look as if they had grown in long strips with great gaps between. This is caused by the want of evenness in sowing the seed; the sower having nothing but his eye and memory to guide him, takes too wide a strip at a time, and in throwing the seed the bulk of it falls directly in front of him, leaving the edges of the strip he thinks he is covering with a mere sprinkling of a few scattered seeds.

In some cases the wind will so drive the seed as to make botch work of even what the best sowers have done.

In sowing clover, the better plan is to have several small poles, with a rag on the end of each, and plant these in a line, one at each end of the field, and one, two and three in the centre, according to the size of the field, in the same way as is often done to mark the line of the first furrow in commencing a new bout in ploughing. The sower, when he starts, places a pole exactly the distance from the one standing at the head of the field as he intends to make his cast of seed extend. As he comes up to those in the line in throw-

ing his cast, he removes them exactly the same distance to the side he is to come back on. In this way there will be some regularity of casting ensured. When the land is divided by plough furrows into spaces just wide enough to be covered at two casts, the furrows may be made the guiding line.

This season will doubtless prove a very trying one on all newly seeded grass. The early part of the spring was so dry that there could not be a good *catch* of the seed; while the latter portion of the season, since the rains came, has been such as to promote a heavy growth of weeds of every sort to choke out the weak plants of clover. In cases where there has been a partial *take* of the clover, something may yet be done—after the grain harvest—to fill up the vacant spaces. The best way is to take a large garden rake and some seed to the field; sow every vacant space, and cover lightly with the rake. This late-sown seed will form plants strong enough to stand the ensuing winter, provided all stock are kept off, and the plants allowed to grow so as to make a top that will act as a winter mulch to them.

Again, we find most farmers are in the habit of turning their stock into the newly seeded clover immediately after the grain which covered the land, and acted as a mulch to protect the young plants from the scorching sun of summer, has been cut and removed. This is one of the great causes of failure. The young plants at this time want to have every chance given them to increase in size and cover the ground, so as to act as a mulch to their own roots. It is better to leave such fields entirely shut up from stock until at least the end of September, when, if there is a good growth of strong plants with a heavy top, it will do no harm to feed down with stock to only a moderate extent, that is, just so much as will still leave the plants strong and vigorous to resist the winter frosts. With a very weak, thin growth of plants, it would be better to keep stock out altogether, and try what can be done to increase the grass crop by seeding timothy on the land in September, giving a light harrowing immediately after sowing the timothy, and a dressing of superphosphate, which will greatly stimulate the young clover. The young timothy can stand the winter well, and will commence to tiller out at once after starting, so that with a favourable autumn season we should expect the following year's grass crop to be a fair one, so far as covering the ground goes.

EARLY EGYPTIAN BEET.—This new variety of early turnip-rooted beet has been grown by Mr. Thomas K. Richards, of Newark, N. J., and was exhibited by him in New York on the 15th of June. He seems to be well pleased with it, esteeming it a profitable early beet to cultivate, and a full week earlier than the Early Flat Bassano. The color is a very deep red, and the flesh tender and of good quality.