

## Grasses and Forage Plants.

### Perennial Rye Grass.—*Lolium Perenne*.

The Perennial Rye Grass, illustrated on this page (from Flint) is a species of grass that is little, but deserves to be better, known in Canada. In England it is the most important of the cultivated grasses. It is there called Rye-grass, Ray-grass and Darnel. It is a perennial grass, flowering in June; culm growing to eighteen inches in height, erect, and bearing five or six leaves. The leaves are dark green, smooth and glossy on upper, and roughish on the under surface. The root is fibrous.

Perennial Rye-grass has some bad as well as some good qualities. It is a very exhaustive crop, more so than any other grass. It runs out in five or six years. It does not stand drouth well, is less nutritious than other kinds, and when the seeds are ripe, is injurious. In its favor it is urged that it is very early; is adapted to a variety of soils; is less liable to attacks of insects; that it yields an immense quantity of seed. It is from this latter quality that it is so exhaustive a crop. One reason for the diverse opinions entertained of Rye-grass is, that there are several varieties differing only slightly in appearance, but widely in vigor, permanency and abundance of yield.

### Seeding Land to Grass.

After many years' trial, I have adopted Herds Grass and Michigan Red Clover for my grass seeds; and I generally sow about six pounds of each per acre. I prefer sowing in the Spring, when about seven-eighths of the snow has wasted away, and when sown thus early, the freezing and thawing of the earth covers it enough. When I seed with grain, I bush my ground before I sow the grass seed, and roll it afterwards; the roller and the first rain that falls on it, covers it enough, on my land, it being a clayey loam. My opinion is somewhat experimental. On light soils, I think it is a better way to bush and roll after the seed is sown.

The greatest motive in rolling is to make the top of the ground more compact, so the root of the seed, when first started, will have more substance to feed on; and it will stand the hot, dry weather better than it would if the top of the ground was light and porous. The great trouble in seeding to grass as late in the spring as I sow my grain is, the seed will readily sprout if the soil or weather is moist, and if hot, dry weather follows, it dries up the plant before it gets sufficient length of root to sustain life through the drouth. The poorer the soil, the smaller the chance the plants stand to survive the drouth.

I succeed best when my land is prepared in the fall—ploughed, harrowed and bushed, ready to receive the seed in the spring, just as the snow is leaving the ground. In the fall of 1873, I prepared 14 acres ready to receive the seed. The following spring I sowed it when about seven-eighths of the ground was bare from snow. The result was, I got an excellent catch and harvested a good crop of hay from it within four months of the time the seed was sown. I also re-seeded four acres that was seeded the year before when sown to oats. I do not lay the failure of its not catching the first time of seeding, to poor seed or insufficient seeding; but to the seed drying up soon after it sprouted. If I had sown one bushel per acre, I think the result would have been about the same. I got equally as good a catch where I re-seeded on the grain stubble as I did on the other. The seed that I sowed on the eighteen acres was ninety pounds of Herds grass, and one hundred pounds of Michigan clover. In my opinion and the opinion of my neighbors (who passed over the field last fall) there was a sufficient quantity of seed sown on the ground.—*Cor. Maine Farmer.*

**BROME GRASS.**—The *Boston Cultivator* says:—The Brome-grass (*Bromus mollis*) about the beginning of the present century, was grown in the district of Kilkenny and other parts of Ireland, and it was reported, that the English dragoon regiments quartered there were ready to give 10 shillings a ton more for hay made of Brome-grass than for hay made of Ray or Rye-grass. In Withering's time Brome-grass was sown often with Clover. Curtis and Martin both recommended it in their botanical writings because of its early growth and the largeness of its seeds, which, in their opinion, made the hay more nutritious. This was when grass was cut late, when nearly ripe. It was also to be extensively cultivated in Scotland, and Lawson notes the practise which he condemned. He says 'to that practice of sowing Brome-grass may be traced its appearance in Rye-grass fields, where now regarded as an intrusive weed, indicative of impurity in Rye-grass seed, though like the Wild Oat (*Avena sativa*) and other indigenous annuals, its presence may, at least occasionally,

be traced to the seeds of former crops retaining their vitality when buried to a certain depth in the soil.' This is a somewhat analogous case to the attempt to cultivate Chess or Cheat in Massachusetts, or the recommendation of Twitch grass (*Triticum repens*) in the New Hampshire Agricultural Transactions. Such frauds and impositions upon the credulous farmer, show the want of accurate knowledge on the part of those who set up as teachers in, and of, what relates to, and concerns the prosperity of farmers in their varied rural pursuits. This is our apology, if any be deemed necessary for answering more at length the questions of our correspondent, concerning grasses sent for names and uses, etc. The number of grasses and clovers to be profitably cultivated as forage plants, is really very small out of the gramineal or grass family and *Trifoliums*.

### A New Clover.

Mr. Patrick Sherriff, long a prominent Scotch farmer, and who made an agricultural tour in this country upwards of forty years ago, is still as deeply interested as ever, it seems, in his favorite pursuits, notwithstanding his advanced years. The *Haddingtonshire Courier* says:

In the spring of 1872 a plant of clover was picked up by Mr. Sherriff growing in a passage leading from the Haddington Corn Exchange to a garden behind. Few situations could be imagined more unfavorable to the growth of a plant of this kind, the passage being little



Perennial Rye Grass—(*Lolium Perenne*.)

more than ten or twelve feet wide, bounded on three sides by a very high wall, open to the south, and admitting the sun to shine on the plant for fifteen minutes each day, but in a great measure shutting out rain and dews. The plant appeared remarkable for the strength, height and number of sets, and having been noticed in flower the year before, it cannot now be less than five years old, and has borne five crops of seed. The crop of 1872 was lost without having been gathered; that of the following year was sown by Mr. Sherriff in a garden in Haddington, and about 160 plants have been transferred from the seed bed. The original plant continues strong and healthy. Its height on the 4th of September last, by actual measurement, was 3 feet 8 inches. The new clover has every indication of being perennial. Should such be the case, and the plant retains its gigantic habit, it is needless to add that Mr. Sherriff's latest discovery will prove an important addition to British agriculture, both with respect to saving of seeds and increase of fodder.

### Grass for Lawns.

The *Gardeners' Monthly* is inclined to believe that the best grass for American lawns has not yet been discovered. "In this part of the world we have had great faith in the Rye grass, *Lolium perenne*, and we have frequently recommended it for this purpose in our pages. It is a beautiful grass for lawns. It is the first to get green in spring, and its shining leaves, shaken by the spring breezes, make a very attractive green sward. But this season, in these parts, it is all dead, killed by the severity of the past winter.

"It is a new lesson for us to learn, as we were under the impression that this grass would endure any amount of cold. It seems not,—and although this is the first time it was ever killed in Philadelphia, it is evident it will not be safe for any northern region. The so-called lawn mixtures of English grasses are worse than this, and should never be used.

"Up to the present time *Poa pratensis* (June grass) has proved the best, and for the present we should advise lawns to be made wholly of this; we believe, however, that some of our native grasses might prove far superior, and should like to see experiments made. A couple of years ago we received a small package of some kind of grass seed from the dry regions of Utah. It has been now two winters and one summer green in the driest time, and perfectly hardy,—but, showing no flowers so far, it cannot of course be named. We merely mention the incident to show that in all probability there are native grasses which we could well employ for lawn purposes."

**Cow Grass.**—This grass, after which a subscriber enquires, is botanically *Trifolium pratense perenne*, Perennial Red Clover. It differs from the common Red Clover (which is biennial) in being perennial, in coming later into flower, and in having rather more woolly leaves. It succeeds well in dry pastures, and in grounds shaded by trees. It is not much cultivated on this Continent that we are aware of, but it is in good repute in England. Can any of our American exchanges give us any information about Cow-grass and its properties?

**SEED LIBERALLY.**—In seeding it is always most economical to seed liberally, for unless the grass occupies the soil, weeds will come in, and oftentimes overshadow the grass. If we could be sure that every seed would grow, a smaller quantity would fill the soil, but experience proves that only a portion of the best seed matures plants. The grasses may be seeded at any season when the soil is in a fit state for germination and growth—spring, autumn, or late summer, as most convenient. Clover is one of those plants which, if not pretty well rooted when winter sets in, is apt to winter kill; hence we sow this in spring usually.

**SOWING GRASS SEEDS.**—The farmer, to seed well, should know his soil, its adaptation to certain grasses, and he should be influenced by the system of husbandry he wishes to adopt. A farmer would be unwise to sow red clover seed on moist soils to be heaved out by frosts, when the Alsike clover would probably do much better. If the farmer wishes to act wisely by so seeding as to improve his soil, if adapted to red clover, he would sow it because in its growth it draws largely from the atmosphere, and the roots are of great value in enriching the soil for future crops. It is important that farmers sow grass seeds that ripen nearly at the same time, and are adapted to our climate. Early or June clover and orchard grass should be sown together, especially on meadow lands foul with white daisies, so that he may cut them when fit for his stock and before the seed has sufficiently matured to grow. The large or late red clover, timothy, red-top Italian, rye grass, meadow fescue, ripen about the same time and are acclimated.

**PASTURES, MEADOWS AND LAWNS.**—A Southern Indiana correspondent writes—Orchard grass, Kentucky blue grass and white clover, and, if the ground is low or moist, add red-top, and you have the finest and most productive pasture known among extensive stock-growers, as it requires no re-seeding, but improves in quantity and quality, carrying more stock each succeeding year—invaluable for woods and pastures, and should be extensively sown in the burnt forests. Leaving out the orchard grass (as it is too rank and rapid a grower), you have the best mixture that can be formed for lawns, yards, &c. Orchard grass alone makes the most profitable meadow, as it is immensely productive, makes excellent hay, and twice as much of it as timothy, for a term of years. With us timothy and red clover cut only about two good crops, and frequently but one. The farmer needs reliable meadows. To sow corn, millet, Hungarian grass or some other substitute every year or two, to make up for his lost clover or timothy crop, is very discouraging, it being expensive as well as annoying. Orchard grass is the remedy, and is destined at no distant day to stand at the head of all grasses for pasture or hay.