Carpet Grass Seed Production

By W. R. Dodson
Bureau of Animal Industry, United States Department of Agriculture

In some of the older literature, say that of 30 years ago, carpet grass (*Axonopus compressus*) is designated as Louisiana grass. Its commercial development did not begin actively however until about 1921, at which time special campaigns for the development of better pastures were being conducted in the southern states, and as a result it came to be one of the favorite grasses for sowing in new pastures. This created an active demand for its seed, and the harvesting of its seed has accordingly come to be an important part of the farm work in many places of the South. The grass thrives on almost all types of soil and withstands drought well. It is more resistant to cold than is Bermuda grass and comes out earlier in the spring than does Bermuda. It is now generally distributed in the Gulf Coast states, the northern portion of South America, and the islands that lie between the United States and South America.

Carpet grass forms a very compact, dense sod, withstanding grazing well, and on many types of soil crowding out most other grasses. The leaf blades are short and broad. The main stems spread on the ground and take root at each joint. At seeding time slender shoots grow to a height of 6 to 8 inches, terminating in two or three slender spikes on which the small seeds are developed. These seed stalks are so slender and the leaf blades so short as to make the grass undesirable as a hay plant. Such characteristics however make it desirable as a sod grass where the soil is subject to considerable trampling, as on the fairways of golf courses.

The harvesting of carpet grass seed for commercial use is a very simple process but requires special equipment. The sods are grazed by cattle in spring and until near midsummer. The cattle are then removed, the fields clipped as short as possible with a mowing machine, and the clippings carefully raked off. A crop of seed soon develops. When the seeds have reached maturity in sufficient quantity and the weather is favorable, the crop is cut with an ordinary mowing machine fitted with a special attachment for gathering the cut material into small bunches. Ordinarily the attachment consists of a series of small iron rods projecting about 18 inches to the rear of the mower bar, free at the back end, comparable to the tines of a many-tined pitchfork or to a set of grate bars. A baffle board at the back is so arranged that it can be lifted with a foot lever. The man driving the mowing machine lets the cut grass accumulate on these grate bars until there is enough to make a small pile, and then raises the baffle board with his foot lever, and the resistance of the stubble against the cut grass holds it while the mowing machine moves out leaving the cut material lying on the sod. The baffle board is then allowed to fall back to place so as to gather the next bunch. The driver never stops for dumping. When the seed has dried sufficiently, the hay is either stacked for a convenient threshing time, or else threshed directly and the drying of the seed subsequently completed with care. The ordinary grain thresher is used, with special sieves and proper adjustment of the air draft for cleaning the seed. A second crop of seed is harvested in the late fall. Sometimes three crops may be harvested in a year. As new shoots are coming out continuously, the seed harvest always includes some immature seed; but most

of this immature seed can be eliminated in the recleaning. Most of the seed is recleaned after it comes from the thresher.

According to the best information I have been able to obtain without exhaustive inquiry, the best seed-producing sections are eastern Louisiana, western Mississippi, and such portions of the Gulf Coast states as have a loam soil of moderate fertility.

QUESTIONS AND ANSWERS

All questions sent to the Green Section will be answered in a letter to the writer as promptly as possible. The more interesting of these questions, with concise answers, will appear in this column. If your experience leads you to disagree with any answer given in this column, it is your privilege and duty to write to the Green Section.

While most of the answers are of general application, please bear in mind that each recommendation is intended specifically for the locality designated at the end of the question.

Effect of close cutting on bluegrass; controlling clover in fairways. Our fairways and tees were planted in late fall four years ago. The fairways were seeded with a mixture of 4 parts of Kentucky bluegrass and 1 part of recleaned redtop, at the rate of 150 pounds to the acre. The tees were seeded with the same mixture at the rate of 200 pounds to the acre. The soil of neither the fairways nor the tees was fertilized sufficiently to insure vigorous growth. The soil is naturally an alkaline clay which packs and bakes readily during summer. The grass on our tees burns out after the first spell of intensely hot weather in spite of the fact that they have been continuously topdressed since being constructed. The tees have been cut usually not more often than twice a week and never shorter than ½ inch. It is argued that more frequent and shorter cutting of the tees would make the grass stool out and become stronger and thus better able to withstand drought and heat, while on the other hand it is argued also that more frequent and closer cutting of fairways and tees is liable to make the grass turn yellow and burn out during dry, hot spells, on account of both the shortness of the blades and the tendency of the soil to pack more readily with short turf. What is your opinion on this point? Also give us your opinion on the effect of close cutting on the clover with which our fairways are infested. The clover seems to be more prevalent than previously in spite of the fact that everything possible has been done to encourage the growth of the bluegrass. The fairways are cut twice and sometimes three times a week, never much shorter than ¾ inch. It is argued that it would benefit the bluegrass if the fairways were cut shorter and more often, since the clover blossoms and leaves would thereby be removed to greater extent, thus permitting the bluegrass to have more sunshine and air. (Pennsylvania)

ANSWER.—The argument that grass stools and becomes stronger and healthier under close cutting so that it can better withstand drought and heat is correct if one is comparing a hay field or deep rough with a pasture or fairway but it does not hold if one is com-