STANDARDIZED LAWN GRASS SEED MIXTURES

The state of Connecticut has issued regulations for standardizing grades of mixed lawn grass seed. Adherence to these grades is voluntary but the grade names may not be used unless the seed in the package carrying the grade designation complies with the specifications issued by the Commissioner of Agriculture. These regulations, which have been published by the Connecticut Department of Agriculture in Bulletin 52, and which became effective February 1, 1938, are based upon three classes of seed.

Group I (Permanent grasses) includes Colonial bent, creeping bent, Kentucky bluegrass, red fescue, various-leaved fescue and white clover. Group II (Nurse grasses) includes temporary grasses used to make a quick showing, as redtop and ryegrasses. *Poa trivialis* is also mentioned in this group. Group III (Permanent special purpose grasses) includes species believed to be suited to shady or damp places, those especially resistant to drought and heat, and those thought suitable for use on athletic fields and playgrounds. As such, are listed seaside bent, Canada bluegrass, fine-leaved fescue, hard fescue, sheep fescue, creeping red fescue, *Poa trivialis* and annual bluegrass.

A fourth group "filler grasses," consisting of crested dogtail, wood meadow grass, orchard grass and meadow fescue, is mentioned only to be condemned and the use of these grasses in standardized mixtures is prohibited.

The species recommended are said to be suitable for Connecticut conditions. The table giving the grasses in each group also gives information on the minimum germination requirements, time required to produce turf, soil adaptations and remarks on each grass.

Three grades are established, Gold Seal Grade (highest quality), Blue Seal Grade (high quality), and Red Seal Grade (good quality). For each grade the minimum quantities of pure seed of species in Group I and the maximum content of seed of species in Group II are specified as well as the maximum percentages of inert matter and weed seed. The percentage of germination required for seed of each species is given under the group headings and it is provided that if such mixture is recommended for shady places a given percentage of the mixture must consist of seed of species listed under Group III.

It is surprising to find Colonial bent under three common names with different germination requirements. The inclusion of Washing-

ton and Metropolitan creeping bent seed in this list seems unnecessary since no commercial supplies of seed of these strains are available, nor are they likely to be produced.

MORE UNIFORM RESULTS IN TESTING KENTUCKY BLUEGRASS SEED

Kentucky bluegrass is the standard grass used in much of the United States for lawns, fairways, and other areas in grass. Hundreds of samples are tested every year to determine the quality of the lot used. The purity of any sample depends, among other things, on the number of empty florets present and the seed analyst finds difficulty in telling whether a floret is empty or contains a good seed. This often results in lack of uniformity in the test with possible dispute between the buyer and seller.

Porter in Iowa has studied this problem. His work was published in a research bulletin by the Iowa Agricultural Experiment Station. He developed a special blower giving a uniform air blast. By means of this blower the empty florets can be removed to a uniform degree and thus the personal equation can be eliminated. Porter's paper is mostly technical and intended to be of use to seed analysts, but the fact that more uniform results in the purity and germination tests of Kentucky bluegrass are possible is of interest to all users of this seed.

THE CARPET GRASSES

It has been assumed that all the forms of carpet grass in the United States belong to the same species, but Agnes Chase in the Journal of the Washington Academy of Science has pointed out that the broadleaved form is the original or type form of *Axonopus compressus*. It is said to occur in the United States only in Florida and Louisiana. The narrow-leaved form is common in the United States from North Carolina and Florida and west to Arkansas and Texas. It is said to be undoubtedly native and more cold resistant than the broadleaved form. The broad-leaved form may have been introduced but is more probably native though less widespread than the narrow-leaved form.

Mrs. Chase suggests that the narrow-leaved form be made a distinct species under the name *Axonopus affinis*. The broadleaved form is the true *Axonopus compressus*.

The control of weeds is said to be the most important problem of the New Zealand greenkeepers.