



When sowing a lawn, weeds like these (above) are certainly non-grata. Many come from residual seed in the soil. They can be pruned when good, weed free seed of modern cultivators is planted.

## TURF CONTAMINANTS

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and speedwell, are especially injurious in the lawn and worthy of a C rating. Troll marks 26 of the controllable weeds (Classes A and B) of our talley as being introduced through lawnseed, at least occasionally.

**Midwest and Border States:** The situation in the upper midwest is not greatly different than in the northeast. Dr. Newman, Wisconsin, says that, unexpectedly, *Alopecurus aequalis* (a foxtail), a water-loving species, was quite a problem during 1973. *Poa trivialis*, also thriving on moisture, has been an even worse pest in sod. In Wisconsin most sod is grown on muck soil, where pre-emergence preventers don't work well.

Dr. Daniel, Indiana, lists the same coarse grasses and sedges as occur in the Northeast as being among the most pernicious, certainly Class C candidates. In the southern Midwest bermudagrass and even dallisgrass join the group (though neither survives in the northern Midwest). Nor does Daniel think kindly about *Poa annua*. Barnyardgrass, crabgrass, goosegrass, and *Setaria* foxtail are universal pests, controllable but troublesome.

In the border states lawn weeds become more diverse, and often harder to control (crabgrass, for example). Dr. Bingham says that in Virginia goosegrass, ground ivy and sandbur *Cenchrus* can be controlled, but not easily. He'd go along with

Class C weeds troublesome farther north.

**Plains States:** In the prairie environment the weed cast changes, though irrigation brings in weeds typical of more humid climates. Dr. Keen, Kansas, finds clover, henbit, knotweed, and violet fairly troublesome, wild onion, very bothersome. On the other hand, bentgrasses are not much of a problem, nor most of the coarse perennial pasture grasses. It seems to add up to fewer Class C problems in Kansas.

In Colorado, Dr. Fults finds bentgrass, dandelion, tall fescue, orchardgrass, quickgrass, and spurge to be weeds of major importance. Though persistent, some of them are, of course, controllable, and then Class B rather than C. Some weeds causing difficulty in the east are of little or no importance, — dallisgrass, oxalis, wild onion, violet, even sedges and *Panicum* witchgrass. He notes that a lot of grama *Bouteloua* crops up in lawns in southern Colorado, a prairie species seldom encountered in the east. Surprisingly, puncturevine *Tribulus* is only slightly important, are as nimblewill and bermudagrass. Bromes, chickweed, clover, crabgrass, ryegrass, sandbur, yarrow and some of the other weeds rating Class C farther east are only "moderately important."

**Far West:** Dr. Youngner, California, seconds the nomination of difficult eastern pests (goosegrass and dallisgrass, for example), and adds a few notorious local examples as well: dichondra and pennywort *Hydrocotyle*.

Of course in California some of the "weed" grasses are also used as lawngrasses, — common bermuda and tall fescue. The eastern haygrass species such as orchardgrass and brome grass are not serious in lawns in California. Velvetgrass is quite difficult, but not too commonly met with.

Prostrate spurge is vicious, as may be bur clover *Medicago hispida*. Occasionally *Poa trivialis* is noted as a contaminant in some seed lots. Fortunately, nimblewill is seldom met with. Kikuyugrass *Pennisetum clandestinum*, a tropical introduction, is nearly uncontrollable where it gets started, though hardly a lawnseed problem. □

## European Eupip. Dealers See Mfg. Plant, Sod, Turf

Fifty-two European turf maintenance equipment dealers toured a sod farm, two high school athletic fields and the Ryan Equipment Company manufacturing plant in St. Paul, Minn.

The two-day field trip was hosted by Ryan officials in cooperation with Orag Inter Ltd. of Baden, Switzerland. Orag Inter Ltd., one of 19 Ryan distributors operating in Europe, arranges similar tours to the United States every two years for its dealers and their wives.

The visitors from France and Switzerland represented turf maintenance markets including landscaping, retail sales and golf course maintenance. The dealers were in greater St. Paul in mid-October. They were accompanied by James B. Briggs, group vice-president of non-marine products with Outboard Marine Corporation; Vaughn E. Border, director of marketing with OMC-Lincoln; Vern Worrel, general manager of Cushman and Ryan turf maintenance equipment; and Russell Rose, a district sales manager.

On the first day, dealers toured the Label Lawn sod farm in nearby Lake Elmo, Minn. Label Lawn covers more than 600 acres and is one of the largest sod farms in Minnesota. The dealers also visited athletic fields in neighboring White Bear Lake and Anoka, Minn. Both fields are undergoing a five-year experimental turf maintenance program co-sponsored by Ryan.

The educational trip ended with a visit to the Ryan manufacturing facility. The plant manufactures turf maintenance equipment and employs more than 100 persons.