

Common ragweed (left) is an annual, reproducing by seed only. It is widespread throughout North America in fields and waste places. Each fall, ragweed produces large stocks of irritating pollen which contribute to the suffering of "hay fever" victims. A second species, giant ragweed (Ambrosia trifida) (right) is also an annual and an equally bothersome pollen producer. Giant ragweed has large, hairy, three-lobed leaves; common ragweed has hairy, multilobed leaves, each with a distinct midrib.

Stems are similar in both species: coarse, rough, and hairy. Giant ragweed has stiffer hairs. Height of common ragweed seldom exceeds 4 feet, but giant ragweed can attain 18 feet in moist fertile soil. Mature woody stems and stubble of both species persist into the following spring.

Flowers are unisexual in both species, that is, male and female flowers are found separately on the same plant. Tiny light-green male flowers, which produce pollen, are found in alternating rows on terminal portions of stems. Rows of male flowers are about 6 inches long. Inconspicuous female flowers are found where the leaves join the stems and at forks in stems near the tops of each plant.

Seeds are enclosed in a woody hull 1/8 inch long. Hulls are ridged with blunt spines surrounding the seed tip. Roots of both species are easily pulled from soil since they are annuals. Roots are classed as taproots.

A third species, perennial or western ragweed, A. psilostachya, is a common inhabitant in the Mississippi Valley and westward. It is distinguished from common ragweed mainly by its spreading rootstalks, its occurrence in dense patches, and its finely divided, lobed leaves. It also seldom exceeds two feet height. Flowers and seeds are somewhat similar to other ragweeds.

All of these ragweed species can be controlled effectively with 2,4-D while they are in the fast-growing stage before midsummer. Repeat applications may be necessary. Later attempts at control are unsuccessful because stems become increasingly woody. All three species are susceptible to semi-permanent soil-applied herbicides.

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each lot in a different direction.

For sowing mechanically, divide the seed into two lots and sow in two directions perpendicular to each other.

If seed is drilled, it should be drilled in at least three directions. Approximately 10% of the seed should be showing after the seed is covered.

When rolling seed in, do it with a light roller only, White advised. If it is a water-tank roller, it should be no more than a third full.

An area to be sodded should be prepared in the same manner as a seedbed. Sod should be laid across a slope and staked as needed. Joints should be staggered.

If peat sod is used, work some peat into the topsoil before laying the sod.

After it is laid, sod should be soaked and then watered well for three weeks or until it is well knit to the soil.

Fertilizer Tips

The highly soluble forms of nitrogen and potash are easily leached from the soil and will burn when improperly applied at high rates, R. S. Farnham, Assistant Professor of Soil Science at the University, warned the group.

Slow-release or controlledavailability fertilizers are relatively new and offer many advantages over the conventionaltype fertilizers used on turf grass. Among the advantages of slow-release fertilizers are: (1) a single application may be sufficient; (2) they will never burn if improperly applied; (3) they release plant nutrients when needed; (4) they give uniform grass growth instead of periodic flush periods of growth; (5) they result in less leaching; and (6) they can be stored better.

Slow-release fertilizers for turf include both the organic and inorganic types. Sewage sludge and ammoniated peats are natural organic forms and the synthetics include forms of (Continued on page 32)