

Annual bluegrass (1), also called dwarf speargrass, is a winter annual which sprouts anew from seeds each year. Distributed throughout the United States, annual bluegrass thrives on moist, rich soil in cool temperatures. This weed is the light-green lawn invader which manages to form seed heads no matter how short it is cut. Annual bluegrass is unique among lawn weeds in this respect. The factor which makes annual bluegrass a weedy species is that following its active spring growth, it sets seed, turns brown, and dies out when the weather gets hot and humid.

Stems of annual bluegrass are one to 12 inches high; they may run along the ground and turn up at the ends. They sometimes root from stem joints. Leaves are light green and very soft.

Small spikelets (2) in the panicle, or seed head, bear 2 to 6 flowers each. Seeds (3), about $\frac{1}{1.6}$ inch long, shed in the early summer, sprout by fall and annual bluegrass forms rosettes to pass the winter. Growth occurs in the spring before most other grasses break dormancy.

Roots are shallow and easily pulled up. There are no rootstocks, and annual bluegrass can only produce a dense sod by a thick growth of single plants.

Presence of annual bluegrass on a lawn may indicate faulty maintenance. Soil may be too wet, it may be compacted, or there may be some element missing which is weakening the desirable turfgrasses.

For control of annual bluegrass in Kentucky bluegrass and other cool-season grasses, Dacthal at 10 lbs. per acre or Zytron at 15 to 20 lbs. per acre may be used before the annual bluegrass germinates. It usually starts germination in late August. Simazine at 1 lb. per acre may be used in Zoysia and Bermudagrass turf, but not in Kentucky bluegrass or other cool-season grasses.

Infested lawns may be renovated with a complete program of fertilization (applied in the early fall to promote vigorous desirable turf), liming (if needed), aeration (to relieve compaction), and drainage correction (if faulty).

Prepared in cooperation with Crops Research Division, Agricultural Research Service, United States Department of Agriculture, Beltsville, Maryland.

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Turf-Water, Irrigation Devices Studied at U. of Calif. Turf Day

"Infiltrometers, which test how deeply water penetrates turf, in combination with aerators, can help one revive turf areas which hold water after irrigation because of compaction," Fred Gorman, Farm Advisor, San Bernadino County, Calif., asserted in his address to the University of California Turf Conference, Feb. 11, at the Davis campus.

When 5-inch-deep aeration holes are placed 2 inches apart, water seeps into soil at the rate of 2½ inches per hour. Before aeration, Gorman showed, the rate was 1/16 inch per hour.

Movement of water in the top 4 to 6 inches of soil is essential for healthy roots and turf. Infiltrometers help indicate the efficiency of aeration operations, Gorman indicated.

"Water efficiency on turf can be controlled effectively by water sensitive (hydrostatic) devices such as the tensiometer, which shows how much water is in the soil," Dr. Sterling J. Richard, Soil Physics Professor on the Riverside campus showed with results of 1962 research.

"A gardener applied 60.5 inches of water to a plot by judging when he thought the turf needed water," Dr. Richard explained. "But a plot with a tensiometer, which activated sprinklers when the turf actually needed moisture, only required 40.2 inches of water to an equal sized plot."

The tensiometer indicates when soil tension becomes high as a result of dryness. Richard implied that a saving of 20 inches of irrigation water over large turf areas is significant.

New Folder on Amitrole-90

A new 6-page illustrated brochure on the use of Amitrole-90 for control of weeds along roadsides, in industrial areas, and in irrigation systems, is now available from American Cyanamid, Agricultural Division, Princeton, N.J., and will be mailed to readers who write the firm at that address. Ask for bulletin PE-5287.