## Shrubs Need Antidesiccant, Fertilizer for Winter Aids

Evergreens need to be attended in winter to insure them against death, Purdue University horticulturists point out. And contract applicators should tell their customers of two winter safeguards to protect valuable shrubs.

Since winter sun and drying wind encourage water loss from needles or leaves, and frozen ground prevents roots from drawing water from the soil, evergreens should be sprayed with an antidesiccant or antiwilt spray.

Antiwilt sprays are especially useful on the more tender broadleaved evergreens, such as American holly, Japanese holly, mahonia, and boxwood. Yews and junipers, although more hardy, should also be sprayed.

Shrub roots continue to grow in the winter, and should be fertilized to stimulate this growth and insure an abundance of foliage next spring. One pound of 10-6-4 or 10-6-8 analysis per 100 sq. ft. should be sprayed on the soil surface, hoed gently, and watered.

Tender shrubs should not be fertilized, however, since the additional stimulant may kill the top growth, the horticulturists warn.

## Nutro Lawn Food Adds Dacthal

Dacthal has been added to lawn food by Smith-Douglass Co. for pre-emergent crabgrass control.

Marketed as Nutro Crabgrass Killer and Lawn Food, the new product will eliminate crabgrass and give lawns complete feeding through a high-nitrogen formula, the firm claims. Recommended treatment is 1 lb. per 100 sq. ft.

For more information about the new product, write the company at Norfolk 1, Va.

## N.C. Has Dutch Elm Disease

First confirmed report of Dutch elm disease in North Carolina has been reported in Greensboro. A preliminary survey by the N.C. Forestry Service indicates several infection points on or in vicinity of the Greensboro Country Club. Entomologists say the disease could destroy all elms in the state if control measures are not initiated promptly.



Know Your Species.

Johnsongrass, introduced from Asia and North Africa as a southern forage crop, is now a noxious weed.

This perennial weed ranges throughout the South and north along the Mississippi Basin to Southern Nebraska and eastward through Ohio to the Atlantic Coast. It is a pest of cultivated lands, meadows and waste places, particularly troublesome along irrigation canals and drainage ditches. It thrives on rich river bottom soil.

Somewhat similar in appearance to Sudangrass (S. sudanense), Johnsongrass can be easily identified by its extensive spread of underground lateral stems. These rootstocks are stout with purplish spots, and scales at the nodes (joints). The roots are fibrous and freely branching (1).

Stems are erect, up to 6 feet or more in height (4). The pith inside the stem has a sugary juice. Leaves are alternate, simple, and smooth; 6 to 20 inches long,  $\frac{1}{2}$  to  $\frac{1}{2}$  inches wide. The seed-bearing parts, or panicles, are loosely branched, large, purplish, and hairy (2). Seeds (5) are somewhat similar to Sudangrass, but can be distinguished by differences in structures of the pedicel, the short stalk on the seed that joins the seed to the seed head (3). The tip of the pedicel on Johnsongrass seed is knob-shaped, but the pedicel tip on Sudangrass is rectangular.

Noncrop land may be treated with TCA (trichloroacetic acid), dalapon, sodium chlorate, monuron, or diuron. On Johnsongrass that has been plowed, mowed, or grazed closely, 40 to 50 lb. per acre of TCA has given good control. Where no previous treatment has been given, 100 to 200 lbs. per acre normally gives good control. This treatment results in soil sterilization for 30 days to 24 months, depending on the amount applied, the soil texture, temperature, and the amount of rainfall. Dalapon has been effective as a foliage spray with a shorter residual period in the soil. In humid areas 2 applications of 5 lb. per acre, each during early spring, gives excellent control. In more arid regions 2 applications of 20 lb. per acre will be required.

Treatment of this sort will remove Johnsongrass from areas such as industrial sites, tank farms, highways,r ailroad rights-of-way, and along irrigation ditches. The chemical methods of weed control are proving to be more efficient and longer lasting than the old method of mowing.

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