

Turfgrass Foundation Gives \$10,000 Grant to OSU

A \$10,000 turfgrass management study grant has been awarded for the second consecutive year to Ohio State University by the Ohio Turfgrass Foundation.

According to University Associate Professor of Agronomy Dr. Robert W. Miller, who will conduct the study, the grant makes possible additional research in the fields of better turfgrass on golf courses, industrial grounds, cemeteries, parks, and home lawns.

The Ohio Turfgrass Foundation was founded in 1961 as a nonprofit organization incorporated under Ohio laws. Its three basic purposes are to promote research in and disseminate information on turfgrass management, as well as to encourage turfgrass training of students. It offers several scholarships annually and sponsors a turfgrass conference and show each year. Dates for 1969 are Dec. 1-3 in Cleveland.

Soil Test, Not Plant Use Basis for Fertilizer Need

Some exercises in pencil pushing can be misleading when you figure fertilizer needs, warns Curtis Overdahl, extension soils specialist at the University of Minnesota.

Overdahl says plant composition sometimes is mistakenly used as the major basis for a fertility program. This reasoning that "whatever is removed must be replaced" can cause serious miscalculations of plant nutrient needs.

Merely by replacing the plant nutrients that are removed, underestimates can occur, since factors such

as leaching and fixation losses and the lack of 100% efficient plant use are ignored.

Overestimates of plant nutrient needs are possible, also. Some soils may have sufficient quantities of an element so that additions won't be necessary in a lifetime.

Knowledge of plant composition is important, but exercise care in how you use it, Overdahl adds. A complete soil testing program is your best bet for determining fertilizer needs.

Phosphorus Is Key To Lake Enrichment

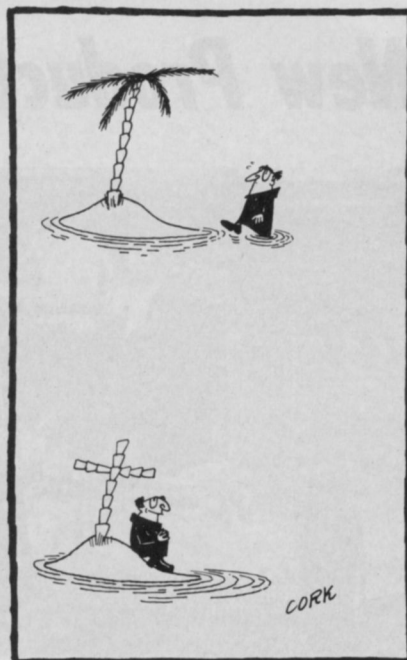
Phosphorus is a key nutrient in the regulation of water plant growth, according to University of Minnesota researchers studying the process of lake enrichment and aging.

University limnologist Robert Megard reports that the amount of phosphorus is often the limiting nutrient of water plant growth.

Even small amounts of phosphorus can cause a great deal of algae growth, he says, estimating that the 3 pounds of phosphorus in the surface layer of an acre of Lake Minnetonka, for example, produces 70 pounds of new organic matter a day.

During a 60-day summer period, more than 2000 pounds per acre of actual algae organic matter can accumulate, according to Megard.

Lowell Hanson, university soils scientist, reports that surface water and sediment are big sources of phosphorus from the land. When soil is able to stay in place and come in contact with soluble or suspended phosphorus compounds, soil particles absorb the phosphorus quite efficiently, he says.



He explains that spray irrigation of sewage or feedlot effluents is a possibility for cleaning up phosphorus-polluted waters. Another method may be the use of inland potholes used as sites for settling and absorbing nutrients before they get into the lakes.

Analysis of tile water samples from fertilized fields in southern Minnesota indicate that water percolated through the soil contains about 20 parts of phosphorus per billion parts water, the researchers report. This would mean that about 1/100 of a pound of phosphorus would be removed from an acre of land if 2 inches of water were collected by the tile lines over a year's time, they explain.

On a township basis of 23,000 acres this would total up to the phosphorus equivalent of 1200 pounds of a 0-45-0 phosphate fertilizer, they add.

Slide Rule 'Errs' on Sod Webworm Control

An error has been found in the 1969 Cornell recommendations for sod webworm control, says Kirk Personius, Monroe County, N.Y., Cooperative Extension Agent.

Recommendations for sod webworm control call for Sevin (carbaryl) at the rate of 2 qts. of 4F; or 4 lbs. of 50W per 5000 sq. ft. This results in more than 17 lbs. per acre, or almost twice that recommended by the producers of Sevin.

The United States Department of

Agriculture recommends 4 oz. of Sevin per 1000 sq. ft., or 174.42 oz. per acre. The Cornell recommendations, calculated on a per-acre basis, resulted in 17.42 lbs. per acre. Apparently the person making the calculations, said Personius, made two mistakes — thinking in pounds rather than ounces and misplacing the decimal point.

In any event, he added, "we think 17.42 lbs. per acre is too much and suggest this be reduced."

USDA recommendations, when raised to a per-acre figure, came to about 11 pounds.

Until more experimental evidence is available, the New York Extension Service advises using carbaryl at the rate of between six and 10 lbs. per acre for control of sod webworms.

Therefore, the 1969 Cornell recommendations should be changed to 1 qt. 4F, or 2 lbs. 50W Sevin per 5000 sq. ft.