Well-Timed Fertilizer Applications Improve Turf in Southern California

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Under southern California growing conditions, timing of fertilizer applications for turf areas is almost as important as the material used.

Many turf people wait until spring to apply fertilizer to turf, when actually the plants should get fertilized two to three months earlier when it is cold and rainy.

In this way the nutrients get into the soil and move into the root zone where they are assimilated into the plant systems early. Thus as *soon* as it starts to warm up, the grass turns green, which follows a four- to six-weeks waiting period during which time nutrients are taken into the plant.

Actually for most Bermuda lawns, which tend to turn brown naturally during the cool winter southern California nights, the best time to fertilize for springtime growth is in late October or early November. This is after the growing has slowed down and mowing gets to be much less a major job. Fertilizer applied at this time has all winter for the rains to carry it into the root zone, and if it is supplied mainly from an organic source, it will not leach out, but will become attached itself to clay particles to be held until used.

The class of materials most needed for good turf production is the natural organics. While it is now an accepted practice to apply fertilizer as pellets, because of ease of application and freedom from dust, it may be said that these same characteristics are needed to promote the best lawn and turf growth. When a pellet is used as a fertilizer there are many times fewer particles per pound than when a granular mixture with a quantity of organic products is applied. Therefore there is much less root contact with the fertilizer by the plant than when a mixture with more particles per pound is used.

Remember, the plant can't go out looking for the fertilizer. The fertilizer has to be placed close to the root of the plant. This is



The West's first college turfgrass curriculum for golf course superintendents will be offered this fall at Mt. San Antonio College, near Pomona. Checking the area where demonstration fairway and greens will be installed this summer are, left to right, Frederick Bove, president of the Southern California Golf Course Superintendents Assn.; Wayne Morgan, University of California farm advisor; David Mastroleo, vice president, SCGCSA; and G. A. Sherman, dean of agriculture at Mt. San Antonio.

especially true in the case of phosphates. In field trials it was learned that phosphates placed three inches away from the plant could not be assimilated by the plant. It had to be closer than that to be useful. Potash is somewhat more soluble than that in water, and nitrogen is still more soluble. However at times, phosphates can be the limiting factor in the growth of turf, especially to root systems.

Nimblewill Threatens Lawns

Gray-green, thickly matted foliage of nimblewill is increasing as a problem weed in lawns in the Midwest, according to Dr. Eliot C. Roberts, associate professor of agronomy and horticulture at Iowa State University, Ames.

To control this sturdy perennial, Dr. Roberts reports: "Only Zytron liquid combines freedom of injury to bluegrass and nearby ornamentals, and also gives some measure of nimblewill control." Zytron treatments made in July and August are more effective than those made earlier in the year, he adds.

Recommended rate of application is 1 pint to 5 gallons of water for 1,000 sq. ft. Zytron can also be used for spot treatments, Roberts points out.

"Since the spray must completely coat the plant for effective control, wet the foliage well at each application," Roberts cautions CAs, "and allow 2 to 3 weeks between applications."

Film on Water Weed Control

A new film illustrating water weed control with the new chemical Diquat is available from California Chemical Co.

Control of water weeds in irrigation and flood control channels, canals, ponds and lakes, is accomplished quickly, effectively and economically with Diquat, the company says.

Titled "Aquatic Weed Control," the 16mm color-sound film runs 18 minutes. It is available on free loan by writing to: L. F. Czufin, Manager, Advertising and Public Relations, California Chemical Co., 200 Bush St., San Francisco 20, Calif.