



The two trees on the left were treated with 200 ppm of Maintain CF 125. The tree on the right was not treated. Note difference in foliage density and height.



Area to the left of this Montreal substation was treated with growth retardant. Note how tall the grass on the right (untreated) is on the right.

Chemical Governor For Nature's Time Clock

MORPHACTINS are a class of space-age compounds that have the reverse effect on Nature's fast moving time machine. They are used to s-l-o-w down plant growth.

Once an area is established, turfgrass managers, superintendents and others generally don the maintenance cap. Whether it is mowing, pruning, or some other form of maintenance, labor must be expended to keep green areas in optimum condition. Morphactins help reduce the maintenance load for the manager.

How? Chlorflurenol, a morphactin under the trade name of Maintain CF 125, has been successfully used to control turfgrass growth. It is absorbed by the leaves and readily translocated with a distinct systemic effect. In a test conducted in Atlanta, grassy areas which had been sprayed once were mowed only twice in a season, compare to five times per season in earlier years.

Nursery plants have been sprayed with Maintain to retard terminal growth. Tree care firms use Maintain A, an asphalt paint formulation, to paint pruning cuts and retard the growth of suckers which may result.

Regulating Nature's growth clock has given managers a new tool in the operation of their business. This is particularly true in maintaining turfgrass on highways. Interstates and tollways, as well as many state

highways, are now constructed with large grassy medians. Generally mowing crews find mowing these medians much to their disliking because of the potential accident factor.

Managers in many states are currently spraying the median with Maintain just after the first mowing. Turfgrass growth is retarded until much later in the season. On one median in Pennsylvania, the area did not need mowing again until just before Labor Day. This represented a savings in mowing costs, and a positive safety program besides.

Tests in the laboratory have now revealed another interesting development. The most effective growth inhibition has been achieved with a combination of chlorflurenol and maleic hydrazide. A distinct synergistic action is present by mixing these two materials.

The combination treatment: 1. interferes with the development of early growth stages of grasses, keeping the vegetative growth short and inhibiting the development of seed heads; 2. the active material translocates to the growing points of the grass and primarily retards the top growth, thus leaving the root system vigorous for a healthy turf. 3. keeps turf green for an extended period of time. 4. controls unwanted annual grasses and broadleaved weeds in the turf, thus improving the turf appearance and making moisture and nutrients available

which would otherwise be utilized by undesirable weeds.

It has also been determined that the combination gives consistent season-long control of a broad spectrum of broadleaved weeds.

U.S. Borax, manufacturers of the product, are now looking at data from tests conducted since 1967 on vines, shrubs and trees. Based on their information, the company has recommended Maintain CF 125 as a plant growth retardant in woody plants and vines.

A foliage spray should be made after a flush of growth or after pruning when the new leaves have fully developed says J. G. Bower of U.S. Borax. Spraying at this time will ensure the desired density, size and shape. Otherwise, tender new growth may curl or twist. Flowering species treated before bud expansion may have a blossom reduction.

Applications generally regulate woody plants by inhibiting terminal growth that develops after treatment. In general, retardation holds for two months (on rapidly growing and frequently trimmed hedges), to six months on vines such as Algerian Ivy, or a year or more on deciduous hardwoods.

Confers, junipers and other in the Gymnosperm family must be treated before buds expand in order to prevent distortion of new growth,

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Highway median left of sign was mowed six times. Grass on right was mowed once, representing a savings in maintenance costs.

CHEMICAL GOVERNOR

(from page 26)

says Bower. Treatment when candles are tender often causes developing branches to droop.

Like any application of environmental protection chemicals, applicators are cautioned about drift when using Maintain CF 125. Al-

though growth does not cease when sprayed with the product, it's a good idea to minimize drift whenever possible. Applicators are fortunate that the volatility of the active ingredient is nil.

Following three years of marketing, U.S. Borax reports these findings from the field: A golf course eliminated the time of two men trimming trees all summer and put them to other more productive work; Washington National Airport in Washington D.C. treated a dangerously steep bank between two levels of the airport and saved the maintenance department five mowings; a power company treated a turf area in November 1970. This area though normally mowed several times a season was not mowed at all in the 1971 growing season; and foliar treatment reduced the cost of pruning in California by \$400,000.

Growth retardants as a standard field practice have not as yet realized their full potential, says U.S. Borax. But their use is increasing steadily as institutions gain experience in applying them to solve individual maintenance problems. □

(Excerpts reprinted by permission from Industrial Product News.)

Ohio Sod Producers Hold Field Day And Meeting

At least 100 persons were in attendance at the Ohio Sod Producers Field Day in early August.

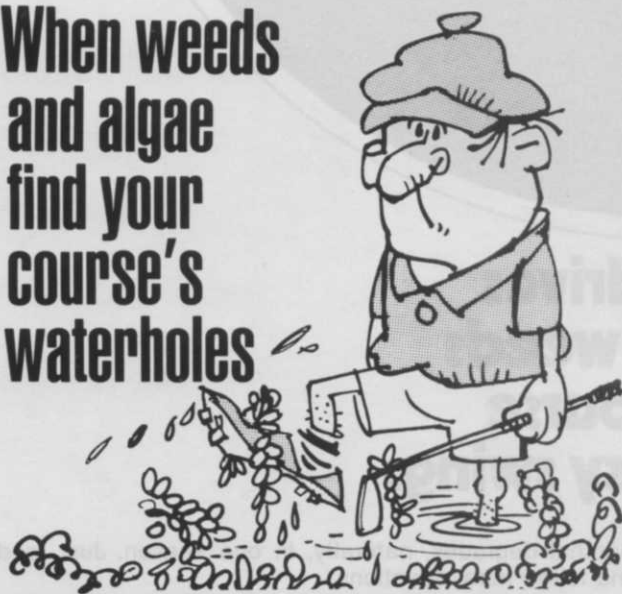
Meeting at Eastside Nursery, Inc., owned by Woodrow Wilson of Canal Winchester, the field day sported event in mowing, spraying and harvesting sod. Delegates crowded around the Princeton Sod Harvester, one of the newest and most uniquely designed machines in the field. It was demonstrated by Sil Schloesser of Princeton Turf Farms.

Greg Nunes, son of John Nunes, Nunes Turfgrass Nurseries, Inc., Paterson, Calif., demonstrated the versatility of the Nunes Sod Harvester to the group. He explained that the machine could harvest sod in either rolls or slab.

Also of much interest during the afternoon was a PTO-driven, 3-point hitch, sprayer manufactured by F. E. Myers. The air blast sprayer can be mounted on a conventional tractor in minimum time.

The summer meeting of the Ohio Sod Producers was held in the evening following dinner. Approximately 23

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