STRIPE SMUT OF TURF

(from page 12)

and can be controlled chemically only by the use of systemic fungicides. For the systemic fungicides to be effective they must be drenched into the root system immediately after application. The best results are obtained in the fall when the temperatures cool or early spring when the grass plants are dormant. Benomyl (Tersan 1991), thiophanate-methyl (Cleary's 3336), and triarimol are systemic fungicides which have effectively controlled stripe smut. However, this is not a permanent solution and repeated application will be required in subsequent years.

In addition to the destruction caused by the stripe smut fungus itself, Kentucky bluegrass varieties infected with stripe smut lose their resistance to the Helminthosporium spp. The systemic fungicides also seem to cause the Helminthosporium resistant variety to become susceptible. It is recommended that turf areas infected with stripe smut, in addition to receiving applications Area on right was treated with a systemic fungicide. Bluegrass plot on left is severely infected with Stripe Smut. Note straw color of infected turfgrass.

of systemic fungicide, also receive an application of a fungicide that will protect against Helminthosporium disease, too.

Cultural practices will aid in reducing the severity of the disease. They consist of applying minimum amounts of nitrogen (not more than 3 lbs. of total nitrogen per 1000 sq. ft. for the season) and not allowing the turf area to become dry.

In summary, stripe smut is a very destructive disease of Kentucky bluegrass. Once a plant becomes infected with the disease it will re-



main so for life. Varieties of Kentucky bluegrass resistant to the stripe smut races prevalant today are available, but in the future after these have been widely grown, they probably won't remain resistant as new races of stripe smut will arise. Chemical control can be obtained with the systemic fungicides although it is not permanant. Applying minimum amounts of nitrogen to stripe smut infected turfs and not permitting the infected turf areas to become dry will aid in reducing the severity of the disease. \Box

Landscape Ambassador Joe Shaw Tells U. S. Story Abroad

The type equipment used and methods followed by landscape contractors in the United States was described by Joseph C. Shaw, South Miami, Fla., when he, the only participating American, recently spoke to members of the British Association of Landscape Industries' annual conference in London. He also attended the Sixth Congress of Land-



Joseph C. Shaw

scape Contractors in Hamburg, Germany.

Shaw is head of Shaw Nursery & Landscape Co., and immediate past president of the 2000-member Florida Nurserymen and Growers Association. Particularly was the conference audience interested in his description of this, and other American trade associations. Many of the British contractors inquired about membership in the FNGA; some said they planned to attend the 1974 Florida convention.

He told his surprised listeners that competing American landscape contractors work together in staging training programs for their employees; that they are also urged to attend special schools pertaining to their work, as well as staff meetings.

In turn, Shaw was surprised to hear that the British landscape contractors *charge* their employees for attending similar events.

Another policy differing from that in the United States is their manner of competitive bidding. The high and low bidders are automatically excluded, leaving the selection to come from the in-between bidders. Shaw was invited to speak to the group again in 1974.

In Hamburg Germany, he admits being impressed with the convention facilities where talks are automatically translated into six languages, enabling an individual to hear a speech in his own country's language.

Shaw concludes that European landscape contractors are several years behind those in the U. S. in establishing standards and creating a professional image, both individually and industrywise.

This could be, he said, because for years landscape work was regarded as merely "gardening." However, attempts are now being made to upgrade the status of the landscape contractor-profession.

Two particularly outstanding events during the trip were the 140acre flower show at Hamburg and the Tivoli Gardens in Denmark. Also, he and Mrs. Shaw visited the French Riviera where, he said, folks take great pride in the use of flowers and landscape plants. However, high rise apartment buildings already are replacing many greenhouses.

At one French nursery Shaw found an inventory of many plants peculiar to Florida and California, and even in some northern portions of the U.S., i. e., various varieties of palms, Norfolk Island pines, roses, citrus trees, Mimosa and Magnolia.

He was told in France that landscape contractors are required to pay a tax for having personnel attend annual training courses and, this is payable whether or not the employees participate.

The landscaping, or lack of it, in northern Italy was particularly depressing after having seen the specimen work along the French Riviera, according to this landscape contractor.

Two problems European contractors face, which are familiar ones in this country; working with landscape architects and taking jobs where not enough money is allocated to complete the work as originally planned.

The continent should be good pickings for plastic and metal container manufacturers. Mostly, only clay and wooden containers are used in the nursery and landscaping industries he said,

Use of Tandex For Highways Projected Upwards

New registrations and application techniques for Karbutilate-type weed and brush killing formulations can be expected to make these recently developed herbicidal materials particularly effective as cost-saving maintenance tools for highway maintenance programs.

This was the prediction of Frank Chestnut, manager of Niagara Chemical's industrial chemicals department, in a recent discussion of new developments in the weed control field.

He cited development programs, both completed and underway, for Tandex herbicide (which contains karbutilate as the active ingredient) that have demonstrated its ability to give extended control of many kinds of weeds, grasses, vines, brush, and difficult-to-kill woody species with a single treatment.

In field programs the compound has provided effective vegetation control along road shoulders and ditch banks, under guard rails and signs, and around light standards and bridge abutments. Uncontrolled weed growth in these areas can obstruct driver visibility, create fire hazards, hinder maintenance crews, and trap moisture that can corrode fences and other facilities.

Among the specific Tandex programs described by the Niagara executive are: Field studies aimed at extending the number of weed and brush species for which the compound is granted registration. A higheranalysis granular form of the material was recently cleared for use in areas where scrub oak, manzanita, and chamise are problems.

Hand shaker packaging designed for applying the herbicide in localized areas to eradicate weeds, nuisance grasses and brush. Such spot treatments have been found especially useful in controlling vegetation that persists in growing where mowers cannot reach. Use of basal (spot) treatments and pre-determined grid patterns to eliminate undesirable brush and vegetation without affecting the surrounding understory.

Researchers report that the karbutilate-based Tandex material may be unusually suited for such purposes. Upon application the compound is characterized by a high degree of vertical percolation (downward but not lateral movement in the ground) which minimizes effects on adjacent areas and results in very effective control of deeperrooted species.





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