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New DuPont Landscape Fabric lets water pass through, reduces wash-away of mulch while it impedes weed growth. So you get healthier, more attractive plant beds with less maintenance work and cost.

Everything you apply for bed care gets to plant roots in the amount you want, where you want it. Water, fertilizers, herbicides and pesticides seep down through this chemically inert fabric to nourish and protect every plant in your bed.

DuPont Landscape fabric is easy to put down with scissors or knife. It comes in four roll sizes from 3- to 12-feet wide.

Call 800-441-7515 for the name of the nearest distributor and more information about DuPont Landscape Fabric. Or write DuPont Company, Room G40955, Wilmington, DE 19898.

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**The dawn of a
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Now two out of three
courses spray
Daconil 2787.[®]**

Unreliable control from narrow-spectrum fungicides. Inconsistent performance from longer residual systemics. That's why two out of every three golf courses are now being treated with regularly scheduled applications of Daconil 2787 fungicide.

And for good reason.

Only Daconil 2787 has a proven record of consistent, first-rate control of eleven major turf diseases. Including tough ones such as Helminthosporium melting out, benomyl-resistant dollar spot and large brown patch.

What's more, there has never been a documented case of resistance in over fifteen



years of use. Even on courses where Daconil 2787 was applied at weekly intervals for many seasons. Convincing proof that you don't have to alternate sprays to avoid developing resistance to Daconil 2787.

And when it comes to cost, nothing is more economical than Daconil 2787. On a per 1000 sq. ft. basis, a single application of Daconil 2787 Flowable Fungicide costs less than Tersan® 1991, Chipco® 26019, Bayleton®, Rubigan® or even Dyrene®.

Plus you never have to add a costly spreader/sticker to Daconil 2787. Because it's already built into the formulation. So you're assured

of full and even plant coverage for maximum disease prevention.

This season, be one of the thousands of superintendents who made the right choice. Make your fungicide Daconil 2787 from tee to green.

The following names are registered trademarks:

Tersan—E.I. du Pont de Nemours & Company

Chipco—Rhône-Poulenc

Bayleton—Parent Company of Farbenfabriken Bayer GmbH, Leverkusen

Rubigan—Elanco Products Company

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OFTANOL works in the top 1-1½ inches of soil, where the grubs are, and remains active.

Grub infestations can be a costly problem for both your customer and you. Before you have to cure it, prevent it. With OFTANOL. Available in liquid or granular form. Always read the label before use.



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IT STOPS THE SPOILERS.**

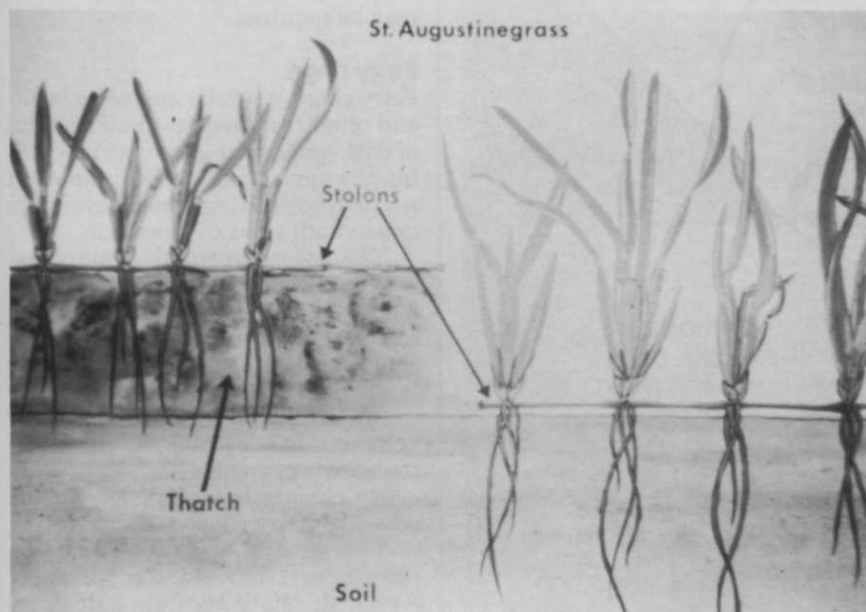


Mobay Chemical Corporation
Specialty Products Group
Box 4913, Kansas City, Mo. 64120

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OFTANOL is a Reg. TM of the Parent Company of
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TURF DISEASE GUIDE



Thatch on St. Augustine grass.

Certain varieties of ryegrass are extremely susceptible to rust, and sometimes severe damage can occur. Zoysiagrass, especially Meyer and Emerald, are most severely infected by rust.

Fertilize to stimulate grass growth, mow on a four- to five-day schedule, and catch clippings. If necessary, a fungicide may be applied to help reduce the amount of disease present.

Triadimefon, chlorothalonil, mancozeb, and cycloheximide are effective in controlling rust.

Spring dead spot

Spring dead spot is a serious disease of bermudagrass in certain parts of the upper Sunbelt. It is found generally on bermudagrass or zoysiagrass under high maintenance.

Damage to the turf apparently occurs during the dormant season. When greenup occurs in the spring, areas a few inches to several feet in diameter appear where the sod is completely dead.

Spring dead spot's causal agent has not been identified. The only control procedures recommended are good cultural practices and limiting the use of nitrogen fertilizer, especially late in the growing season.

Research has shown that fungicides can limit the damage. However, at the present time only Benomyl and PCNB are labeled, and these may be limited uses in certain states.

St. Augustine decline

St. Augustine decline (SAD) is caused by a virus. The symptoms are a mosaic-type chlorosis of the leaf blades that resemble nutrient deficiency or mite feeding. Evidently there are several strains of the virus since there is a great range in damage to St. Augustine.

To this point, the disease has only

Fungicides are best used on a preventative schedule. Once symptoms develop control can be difficult.

been recorded in Arkansas, Texas, Louisiana, and Mississippi. No chemicals are available for the control of SAD.

Several varieties of St. Augustine, however, are resistant to the virus. These can be planted in areas where the disease is a potential problem.

Floritam was the first variety released with resistance to SAD. It is also resistant to chinch bugs. It has poor cold tolerance and should be used only in the lower South.

Seville is resistant to SAD and is more shade tolerant than common St. Augustine. Raleigh has both SAD resistance and good winter hardiness.

Downy mildew

Downy mildew of St. Augustine was first described on common St. Augustine in Texas in 1969. Since then the disease has spread and has been identified in Arkansas, Louisiana, and Mississippi.

Downy mildew appears as white, raised, linear streaks that develop parallel to the mid-veins of the leaf. Streaks appear in the spring and remain throughout the summer, giving the leaves a yellow appearance with some death toward the tips.

Severe disease occurs in grass grown in flood plains or poorly drained areas.

The white-streak symptom is easily confused with the virus disease, St. Augustine decline. However, the virus symptoms are more yellow in color and more mottled than striped.

Downy mildew has been difficult to control with most common turf fungicides. Good drainage is recommended for cultural control.

Pythium blight

Pythium blight can be a devastating disease on overseeded ryegrasses. Bermudagrass and other warm season grasses can be affected to a lesser degree.

An abundance of moisture is required for pythium blight development. In addition, the disease is favored by warm temperatures.

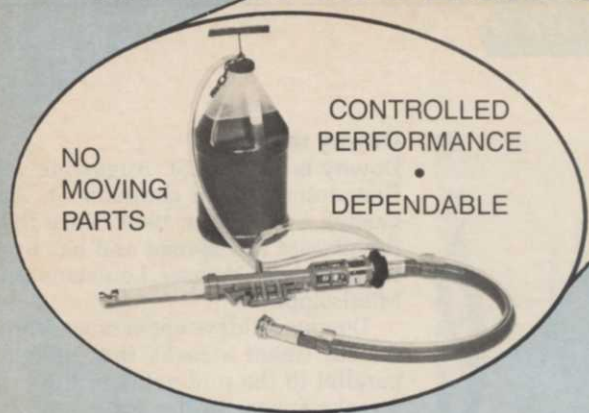
Affected grass is killed rapidly in spots 2-4 inches in diameter. These spots may develop into streaks so that large areas of turf are damaged.

During early stages of development, the affected grass appears wilted and greasy. At times the affected turf spots may have a cottony appearance due to the abundant growth of the fungus. For this reason, the disease is frequently referred to as cottony blight.

Certain species of pythium can also cause root rot on turfgrasses. Due to the restricted root function, the plants become chlorotic and the turf begins to thin.

On overseeded grasses the disease can be limited by using treated seed and delaying the overseeding until as late as possible during the fall. Water as little as possible during periods of favorable activity. The perennial ryegrasses are not as susceptible as annual. Under severe disease pressure, chemical control

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**TURF DISEASE
GUIDE**



may be required.

Fairy rings

Fairy rings generally appear in lawns and other turf areas as circles or arcs of dark green, fast-growing grass during the spring and early summer. A ring of thin dead grass may develop on one or both sides of this circle.

The disease is caused by one of several soil-inhabiting fungi that commonly produce mushrooms. Mushrooms that sometimes appear in the ring are the fruiting bodies of these fungi. Stimulation of the grass is due to the release of nutrients from the organic breakdown of the thatch by the growing fungus.

No chemicals are labeled for the control of fairy ring.

Two general approaches may be considered: removal and suppression. Although relatively impractical, removal of infected soil and grass to a depth of 12 inches or more in a band several feet on each side of the infected area and replacement with clean soil is one solution.

Another approach is to suppress the disease. For low maintenance grass areas, increase the water and fertilization program to stimulate the declining grass inside the ring. Symptoms of fairy ring can be masked by pumping large quantities of water into this area.

Slime molds

Slime molds are a group of organisms that cover above-ground plant parts with a dusty gray-black or dirty yellow mass.

When you look closely at this growth, you see small round balls scattered over the plant. If you rub these between your fingers, a sooty powder emerges. This consists of spores of the fungus.

Slime molds normally live in soil where they feed on decaying organic matter. When the mold is ready to reproduce, it grows up on to the grass blades so that the spores may be spread greater distances.

Slime molds do not feed on living plants. They only use them to assist in the distribution of spores during reproduction.

Slime molds occur during wet weather throughout the spring, summer and fall. They disappear rapidly as soon as it becomes dry. Chemical control is usually not necessary.

WT&T



Frank J. McDonald, Director of Marketing
Cushman Division, Outboard Marine Corporation
Lincoln, Nebraska

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Team up the Cushman Turf-Truckster™ vehicle with one or more of a half-dozen specialized turf care attachments, and you can aerate large or small areas, haul equipment and materials, dump sand, spray, seed or top dress. And, switch from one job to another quickly with the Cushman exclusive "pin-disconnect" system.

The Cushman Turf-Truckster™ vehicle offers plenty of power with the OMC-built 22-hp engine. Choice of 3-wheel or 4-wheel models. And a ground-speed governor control for uniform application over uneven terrain. The Turf-Truckster also rides over fine turf areas without damage to the turf.

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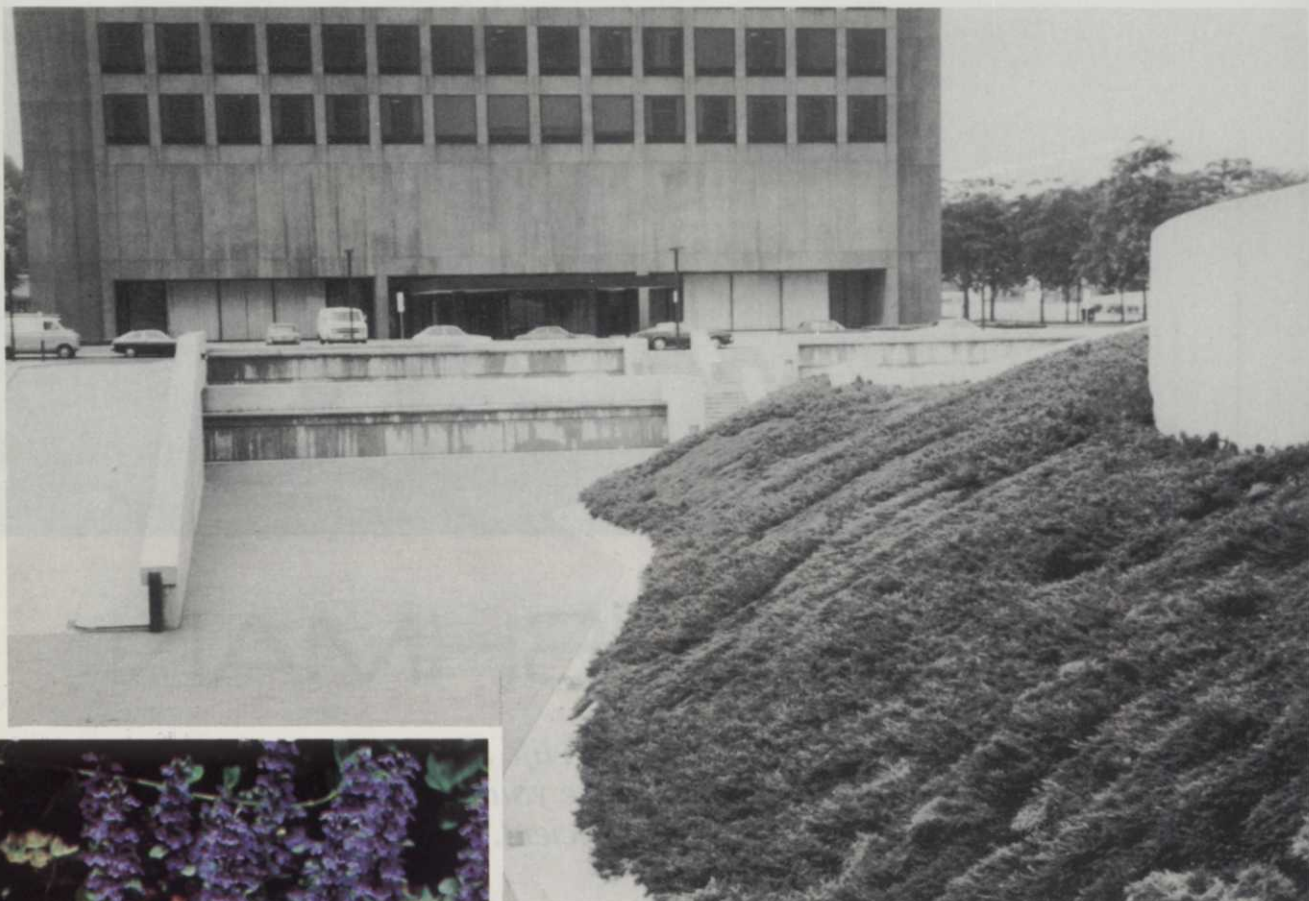
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"OUR REPUTATION IS BUILT TO LAST"

A NATURAL CARPET

Those problem turf areas can be combated with the use of practical ground cover. It's low maintenance and visually pleasing.



Junipers decorate an embankment at the Rainbow Center in N.Y. At left, ajuga reptans feature an attractive purple flower.

by Ann Reilly, Bedding Plants Inc.

Every landscape manager is faced with the maintenance of problem areas.

One answer might be the use of ground covers. They're beneficial wherever a uniform, growing carpet is needed without having to cope with the maintenance of turfgrass.

These could be areas where turfgrasses are difficult to maintain because of low light, steep slopes, poor soil, or where turfgrass won't grow well.

Ground covers are low-growing plants that spread quickly to form a dense carpet for outdoor landscaped areas.

This article will deal with both woody plants and perennials (herbaceous plants) and their uses as ground covers.

Some annual plants are also useful as ground covers where temporary color or a different look each season is needed. The best of these will be listed later on.

The main difference in choosing between woody plants and perennials is one of choice; most perennials die in the winter, leaving bare spaces, while

Rubigan is the best value for dollar spot, and it effectively controls fusarium blight, snow mold, stripe smut and is active on large brown patch when used with a Daconil 2787® tank mix.

Four years of field use show excellent control of dollar spot—even resistant dollar spot, at only 10-14 cents per 1,000 square feet per day of control.

For gradual reduction of *Poa annua* use cumulative rates of 2-3 oz./1,000 square feet

and proper management practices. With Rubigan, you can maintain disease-free *Poa* or gradually reduce it.

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