Bloomers Wildflower mixture, grown and marketed by Turf-Seed, Inc., for golf course, park and landscape use, is sold only through a distributor network. Call us for the distributor in your area, or, if you’re an established seed dealer interested in handling a colorful line, give us a call.

Bloomers Wildflower mixture was selected by Crystal Fricker to perform well in most climatic zones. Individual species and custom mixes available.

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Pythium Blight

Pythium Blight attacks all cool season turfgrasses and Bermudagrass. Normally, it is a high temperature, high humidity and wet weather disease. Severity is greatest during periods of high temperatures (high 80s and 90s), little or no wind movement, where the grass is lush and dense and soil moisture is excessive. The disease can also be devastating with temperatures in the low to mid 60s, especially during periods such as the early Spring and Fall when high humidity and excess water are present, and during overseeding of Bermudagrass with cool season grasses in the Southern United States.

Grass seedlings are extremely susceptible to Pythium attack. Affected seedlings wilt, collapse and die (damping off) resulting in irregular dead patches in the turf. Pythium is a common cause.

It happens fast

The disease first appears as small irregular shaped spots ranging up to 4 or 6 inches in diameter. These spots first appear as dark, greasy or slime water-soaked patches; the leaves soon dry out, shrivel and the color fades to a light brown or straw color. In early morning, or when the air is saturated with moisture, the leaves of diseased plants may be covered with a fluffy white mold growth, hence the name "Cottony Blight." These small spots may enlarge up to 2 or 3 feet in one day.

What to Look For

Diseased areas may coalesce to form streaks a foot or more wide. These streaks are normally caused by fungal structures that were previously washed or carried by surface water from a diseased area. Mower movement will also transport fungal structures from diseased areas to healthy areas, thereby increasing spread of the fungus. Late stages of the disease can spread very rapidly and can kill large, irregular sections of turf in 24 to 48 hours. Infected areas are light brown and usually have no pattern of spots or streaks typical of the early stage.

Gray Snow Mold

Gray Snow Mold or Typhula Blight attacks most northern turfgrasses. The disease usually develops under a snow cover and is observed as the snow melts. Fungus development is favored by high soil moisture and temperatures between 32° and 40° F. The worst attacks of gray snow mold occur in seasons with exceptionally warm wet autumns. Snow fall on unfrozen turf makes an ideal environment for the organism to grow, infect and destroy turfgrasses.

What to Look For

Gray Snow Mold is usually visible at the first spring thaw. From a distance it appears as roughly circular light yellow to straw colored dead areas 2 inches to 6 inches in diameter but may reach a diameter of 2 feet or more. Leaves soon progress to a grayish-white color, finally becoming matted together. Wet grass blades are covered with a fluffy, white to bluish-gray mold or a silvery crust that disappears as the grass dries.

As the infected areas increase in size, the margins may be a darker grayish white. Under favorable conditions for disease, the spots may coalesce and kill large irregular areas of turf. Typhula Blight not only attacks foliage, but infection may move down into the crown area completely destroying the grass plant.
How You Can Get Control.

Use the Right Fungicide, TERRANEB SP.
Simple to use, TERRANEB SP provides fast-acting control over Pythium and Snow Mold. Its time-tested formula works systemically, giving you extended disease protection. It's biodegradable, has extraordinarily low toxicity, and requires lower use-rates, at less cost.

To Control Pythium Blight
Apply 4 ozs./1000 sq. ft. or 10 to 11 lbs./acre of TERRANEB SP when the disease first appears and repeat as needed. It is suggested that you always have some TERRANEB SP on hand, because Pythium Blight occurs unexpectedly, and once it appears, it can spread fast.

Good surface and subsurface drainage is essential when establishing a new area. The soil pH should be between 6 and 7. Do not over-water seedbeds or established turf in hot weather. Maintain adequate, but not excessive, balanced fertility based on a soil test. Avoid over-fertilizing in hot weather with a highly soluble, high-nitrogen product. Good air circulation, light availability and thatch removal are other cultural controls.

To Control Snow Mold
Apply TERRANEB SP Turf Fungicide in autumn before the first heavy snow is forecast. Apply at the rate of 6 to 9 ozs./1000 sq. ft. as little water as is needed to get complete coverage of the surface of the plant. Time and rate of application is dependent upon your geographic location and the normally expected severity of the disease. Applications in northern states would normally be made earlier and at higher rates than in the mid-Atlantic or mid-Continent states. It is important to avoid excessive nitrogen fertilizers after early to mid-autumn.

Keep TERRANEB SP on hand. Because when Pythium Blight and Snow Mold show up, they move fast. So should you.

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Circle No. 118 on Reader Inquiry Card
The wave of the future

Trends, predictions, analyses...all are an accepted part of the bar-graph business world of the '80s. The green industry isn’t immune to the fortune-telling analysts. But not all changes can be calculated on a computer printout. Sometimes, change just creeps up on you.

This issue of LANDSCAPE MANAGEMENT is a good example. It contains a consistent theme echoing through most of the articles: biological alternatives. It isn’t a trend or a prediction. It’s a fact. The green industry is actively promoting biotechnology, native plant materials and environmental consciousness.

Our cover story on wildflowers tells it best. Naturalists don’t want foreign seed polluting local gene pools. The seed companies, through extensive research, are regionalizing mixes as much as possible. The Association for the use of Native Plants in Landscaping (ANVIL) has organized in Illinois to promote using plant materials which are drought-tolerant and conserve energy.

The cool-season turf disease guide by Joe Vargas, Ph.D., at Michigan State looks at biological methods for controlling disease. "Jobtalk" (next month) reviews Agri-Diagnostics, the first company to develop a turf disease detection kit which works with biotechnology. We even received a letter recently from a man who pointed out the differences between weeds and native plants.

Biotechnology has infiltrated the green industry. It not only has changed disease detection and turf management, but plant breeding, as well. Dr. Bill Torello at the University of Massachusetts is developing seed containing endophytes (insect-resistant fungi) through tissue culture cloning.

Chemicals are by no means obsolete. Nor will they be in our lifetime. Nor should they be. Despite the media-incited controversy, chemicals, when used properly, benefit us all. Disease would be rampant today if chemicals hadn’t been developed to kill off pests. Without chemicals, food production would be minimal, and our definition of a "beautiful" landscape would be greatly changed. Chemicals provide a high standard of aesthetics.

Despite the apparent conflict, biotechnology and chemical companies aren’t arch enemies. They have a mutual respect for each other. Most chemical companies have researchers studying biotechnology. The applications are phenomenal.

Biotechnology is truly the wave of the future.

LM Editorial Staff

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The Brouwer Turf Maintenance Team . . . the one to beat. Check our product line and you are sure to find the machine to suit your requirements. Golf courses, school boards, landscapers, municipalities, highway departments, parks and recreation departments will all find a machine that fits the bill - and the budget!

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Housing Authority develops guidelines for management

The Michigan State Housing Development Authority (MSHDA) has developed a two-volume "Landscape Maintenance Guide" which is being distributed to landscape contractors involved in MSHDA projects. This guide is believed to be the first of its kind in the country.

"This is a practical manual that can be used on a daily basis," says Bob Rinck, who co-authored the guide with Alan Almy. "It can apply to anyone who does multi-property sites. We're bordering on areas that other people haven't even touched."

Rinck says that 250 copies have been distributed free and that some colleges and design offices have also expressed interest in obtaining copies. A hardiness zone/climate/maintenance chart comes with the guide.

The guide has served to help strengthen the role of the landscape architect as a team leader among development owners, managers and tenants in maintaining quality housing, Rinck and Almy note.

For more information, contact Rinck, environmental review officer, or Almy, landscape architect, at (517) 373-2001. Address is 401 S. Washington Square, Lansing, MI 48909.

An answer to anaerobic black layer?

Sulfur causes black layer in sand greens, according to researchers at Michigan State University. Black layer is a layer of anaerobic material found at the same level throughout a green.

Joe Vargas, Ph.D., of Michigan State University says theories on black layer attributed it to algae, root dysfunction and excessive water. But his current research shows sulfur to cause the problem.

"Yes, you see algae, but it comes in after the layer is already formed," Vargas says. A rotten egg-like odor will most likely indicate a black layer problem.

Excessive sulfur can get into the green by using water with a high sulfate content or treating a green with sulfur to help balance the pH level. It appears that acid rain also adds to the problem.

The combination of too much sulfur and saturated conditions usually leads to black layer. "You can be most frugal at watering, but then you'll get rain," Vargas says. "Don't mess with sulfur."

Vargas says that sulfur-coated urea products "probably won't release sulfur quick enough to cause a problem." Researchers plan to study potassium and iron sulfate products and those products containing sulfide in the future.

Vargas released his findings at the Reinders Turf Conference in Milwaukee, Wis.

ChemLawn reaches agreement on merger

A merger agreement has been reached between ChemLawn Corp. and Ecolab, Inc., St. Paul, Minn.

Ecolab will buy all outstanding shares of ChemLawn for $36.50 each in cash, ChemLawn officials said. The deal is worth $370 million.

ChemLawn originally was the target of a takeover attempt by Waste Management Inc., Oak Brook, Ill., which offered $33 then $35 per share. ChemLawn rejected the Waste Management bid, then told its banker to seek other possible buyers.

ChemLawn had filed suit for a preliminary injunction from the federal court in Columbus, Ohio after the initial bid, claiming that Waste Management failed to disclose in its tender offer an alleged history of environmental misconduct.

Waste Management officials view the lawsuit as a ploy to use the legal system to delay a tender offer.
Fiberoptics cables create havoc in the turf and landscape industries

The fiberoptics concept may be revolutionary in the telephone industry, but it's giving landscape managers a headache. Fiberoptics has made it almost impossible for landscape contractors to get underground insurance.

"The problem is that fiberoptics cables can't be spliced," says Jim Leatzow of Financial Guardian Insurance. "You have to dig up several blocks to put in a new one."

Fiberoptics cables are buried only 18 inches underground and can be cut with a shovel. Leatzow says that some landscape managers may think they are covered, but really aren't. If the letter "U" appears on your policy it means you are not covered for underground. A letter "X" stands for explosion and "C" for collapse. When the letter appears, the company is not covered.

Landscape contractors are particularly hurt by the insurance crisis. But Leatzow says he never hesitates to issue a policy to a design/build firm: "Landscape contractors will fix a problem before it explodes," he says. "I think it's the best of situations, although the rest of the industry is fearful."

In looking for a good policy, Leatzow says to ask an agent to:

- provide more than one quote;
- assist you in identifying your prime areas of risk; and
- provide unique coverage.

To reduce the cost of your insurance program, Leatzow recommends:

- lowering coverage limits;
- accepting higher deductible;
- joining trade associations; and
- getting brokers and insurance companies involved.

Leatzow spoke at the Landscape Expo in Chicago, Ill.

Manager of the Year

Michael Hugg (center) accepts congratulations and a plaque from Jeffrey Bourne (second from left), president of the Professional Grounds Maintenance Society for being named PGMS/LANDSCAPE MANAGEMENT "Landscape Manager of the Year." Also shown (left to right) are LM group vice president Bob Earley, LM editor Jerry Roche and PGMS executive director Alan Shulder. The award was presented during the Landscape Expo in Rosemont, Ill.
INDUSTRY

Immigration laws spawn new programs

New immigration legislation aimed at reducing the number of illegal aliens in the U.S. is causing employers to scramble for ways to maintain their workforces.

The new law requires employers to fill out an Employee Eligibility Certification (Form I-9) for every person hired after November 6, 1986, and for all those hired in the future.

The form must be signed by the employee within 24 hours after beginning employment and kept on file three years or one year after the end of employment, whichever is longer.

Failure to follow these procedures can result in fines from $100 to $1,000 per employee after June 1, 1987. The law makes it illegal to hire illegal aliens.

As a result, Apprentice Programs are being administered through organized and regulated processes to train replacement workers or finish training illegal aliens as they become naturalized. (Amnesty programs to legalize unauthorized aliens are part of Immigration Reform.)

The Landscape Horticulture Center for Personal Development has submitted apprenticeship standards to the Bureau of Apprenticeship and Training for landscape technician and landscape management technician.

The landscape technician program is a two-year or 4,000-hour program while the landscape management program takes one year or 2,000 hours. Both programs require on-the-job training and 140 hours of classroom training, which is not paid for by the employer.

AWARDS

Groups honor Butler for industry service

Jack Butler, Ph.D., from Colorado State University, was honored for his years of service with a roast by a number of industry groups at the most recent Rocky Mountain Turfgrass Conference.

The Rocky Mountain Turfgrass Association, in conjunction with the Rocky Mountain Golf Superintendents, the Professional Lawncare Association of Colorado and the Rocky Mountain Sod Growers, surprised Butler with the roast at its annual banquet.

Graduate students, former students and industry colleagues participated in the roast. In addition, the associations presented Butler with a watch and a trip to Hawaii for him and his wife Dianne.

PEOPLE

Lawn Institute co-founder dies

Robert W. Schery, Ph.D., died at home in Marysville, Ohio, on March 18th. Schery was founding executive director of The Lawn Institute and a nationally-recognized turf authority.

Schery served as liaison between The Institute and technical specialists at the nation’s universities for more than 30 years.

“Bob was a real pioneer,” said Eliot Roberts, Ph.D., Schery’s successor at The Lawn Institute. “When he came into the turf picture in the 1950s, common-type grasses were in use. Bob Schery was instrumental in orchestrating a shift into the development of proprietary turfseeds.”

“He was the spark behind making a lot of things happen behind the scenes.”

Schery, a Missouri native, received his doctorate from the University of Washington. His books include “A Perfect Lawn” and “Lawn Keeping.” Schery also contributed to the “Ency-

continued on page 14

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