Subdue. The most effective fungicide against Pythium blight and damping-off.

Pythium weather. High temperatures, high humidity and high anxiety. Once Pythium takes root, it can destroy turf within hours. Unless you take a grass-roots approach to Pythium. With Subdue.

Subdue works both on contact and systemically.

Subdue fights Pythium blight and damping-off — as well as downy mildew (yellow tuft) — in two ways. On contact, Subdue destroys the fungi in the soil. Systemically, Subdue prevents disease from within grass plants. That's because Subdue is water soluble — easily absorbed by roots. So Pythium — and now, downy mildew — don't have a chance.

Subdue also controls costs.

Subdue’s systemic action means longer, more effective residual protection. Fewer applications. Lower chemical costs. And savings in maintenance and labor. And Subdue’s low application rate — 1 to 2 fluid oz per 1,000 sq. ft. for 10 to 21 days on established turf — makes Subdue the most cost-efficient protection you can buy.

Before Pythium weather strikes, subdue it. Use Subdue in a preventive maintenance control program. And get a good night’s sleep.

Ciba-Geigy, Ag Division, Box 18300, Greensboro, NC 27419

 HOW TO AVOID SLEEPLESS NIGHTS DURING PYTHIUM WEATHER.

SUBDUE
March is your best chance to save time during the busy season. The work you do in March is largely preventative and can greatly reduce surprises later in the season, for both you and your customers.

Preventative work includes application of pre-emergence herbicides for crabgrass control; dormant oil spraying of trees and shrubs for control of aphids, scales and mites; tree and shrub fertilization, and pruning.

Of course, all work is dependent on labor and scheduling. If you employ seasonal laborers, you might consider bringing them back one month prior to the busy season for retraining and to perform preventative landscape maintenance.

Pruning and fertilization can be done later, but March is optimum timing. Doing it in March lightens your load during the busy season.

Crabgrass control
Technically, crabgrass seed in the soil germinates when the soil temperature averages 55 degrees F. Since few companies have the ability to monitor soil temperature for all areas they serve, the best solution is to concentrate on a six- to eight-week window where crabgrass has historically germinated in your area. Another common indicator of crabgrass germination is forsythia bloom.

The two-month period for preemergence herbicide application ranges from the beginning of March in Texas and Florida to the beginning of May in Ontario. Mid-April is the time cited most by turf weed specialists in the transition zone.

Two applications may be necessary to effectively control crabgrass germination for the entire period. Preemergence crabgrass herbicides include Balan, Betasan, Dacthal, Ronstar, and Tupersan. They should be used on established turf with the exception of Tupersan.

Do not disturb the soil surface during the two-month period since this greatly reduces the effectiveness of preemergence herbicides. Aeration, thatch removal, and verticutting should be done at another time, preferably the fall.

Pruning out damage
Ice and wind of winter inevitably cause branch breakage. March is a good time to inspect and prune trees before they leaf out and conceal winter damage, galls, and insects. It also is an optimum time from the standpoint of wound healing.

Young trees require annual pruning for a few years after transplanting to eliminate v-crotches, to highlight the dominant leader, and to remove suckers. Trees requiring extra attention are crabapples, silver and red maple, ash, birch, beech, and linden. All trees should be examined for damage, disease, and insects.

Overgrown shrubs can be reshaped before rapid growth commences. In fact, the dimensions originally intended for a landscape can be restored at this time. Access to shrubs may be easier prior to emergence of bulbs and perennial flowers.

You may want to delay pruning of some spring flowering shrubs since buds are already formed. These include forsythia, lilac, weigela, spirea, bushy dogwoods, potentilla, and mock orange. Flowering shrubs which can be pruned without losing buds are Rose of Sharon and viburnum.

Dormant oil sprays
If you keep good records you are aware of areas or accounts with sucking insect problems, such as aphids, many scales, and mites. Linden, ash, and crabapple may require annual attention.

March is one of the best times to control these pests without using more toxic materials. It also greatly reduces the breeding population of the pests before they reproduce.

Some plants are sensitive to oil and should not be sprayed. These are primarily thin-barked trees which include birch, beech, hickory and walnut.

Prune first, then apply superior oils in the 80- to 100-second category. This is also done before leaf break. Spray to the point of runoff.

Tree and shrub fertilization
Studies have shown trees and shrubs benefit most from fertilizer applied prior to spring growth. Fertilization is critical for trees that suffered from disease and insect attack the previous year, plants in raised beds or containers, and plants which serve a key role in the landscape plan and can not be easily replaced.

As a preventative measure, set up a two- or three-year fertilization cycle for all important trees and shrubs.

The majority of tree roots are in the top 12- to 18-inches of soil. Nitrogen applied to the surface can leach down to the roots. Potassium, phosphorus and minor elements will not leach out from the surface and have to be placed within the root zone for the tree to utilize them. Once they are in this root zone area, however, they do not leach out and last much longer than nitrogen, possibly years.

Other March ideas
Efficiency is a primary source of profit today. Surprises which lower efficiency by increasing costs rob profits.

Mowing, fertilization, or weed control crews should not have to waste time picking up fallen branches, repairing broken irrigation heads, or pruning out tree and shrub damage. The more disruptions faced by crews the less able you are able to manage their time and your profit.

If there are special jobs to do, March is the best time to rent special equipment also. Chances are the equipment will be available, recently overhauled, and possibly cheaper than during peak season.

The more prepared you are for the busy season, the more efficient you'll be. Planning and preventative maintenance put you ahead of others.
Sometimes your problems just get bigger.
Luckily, so do our solutions.

If you have a need for a big utility tractor to handle tougher than normal jobs, we have two suggestions: the new John Deere 1450 and 1650 Diesel Tractors. These tractors are made for jobs that few other tractors in their price range can match.

Both have tough direct-injection 4-cylinder diesel engines—50 PTO hp in the 1450 and 60 PTO hp in the 1650 (55 and 67 engine horsepower).

On each tractor you’ll find a collar-shift transmission with 9 forward and 2 reverse speeds. Planetary final drives. And a rear-axle mechanical differential lock. Hydraulic wet-disk brakes are also standard, with a separate parking brake for added convenience and safety.

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And both the 1450 and 1650 are available with optional mechanical front-wheel drive, factory-installed. Along with John Deere’s reputation for quality and dependable dealer service.

For the name of the nearest dealer, or a free folder on the John Deere 1450 and 1650 Utility Tractors, call 800-447-9126 toll free (800-322-6796 in Illinois) or write John Deere, Dept. 67, Moline, Illinois 61265.

New John Deere 1450 and 1650 Tractors. Proof that bigger sometimes really is better.
Deciduous rhododendrons, or azaleas, are the backbone of early spring color in the South. Their vibrant reds, scarlets, and oranges make spring gardens worth a second and third look.

Unfortunately, azaleas are not used nearly enough north of Central Ohio. Some of the most colorful azaleas are perfectly hardy to 25 degrees below zero.

Northern landscape managers can have color in a landscape from mid-April to mid-June by taking advantage of hardy azaleas, including Korean, Royal, Pinkshell, Exbury (Knap Hill), and Kaempfer.

The hardy azaleas
Korean rhododendron (Rhododendron mucronulatum) is extremely useful in naturalized settings as an understory plant or in partial sun. This deciduous rhododendron reaches four- to eight-feet in height. It is the first rhododendron in the North Central U.S. to flower during spring (mid-April). This selection has numerous clear pink delicate flowers and an upright oval growth habit. The one cultivar readily available is 'Cornell Pink'.

Korean rhododendron is relatively maintenance-free, although it can have problems with root rot, twig blight, and leaf scorch in full sun.

Pinkshell azalea’s foliage [above] turns from lime-green to red in the fall.
The new 100sx from Ditch Witch...

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1. **LOWEST PRICE.** The 100sx is the lowest-priced small plow on the market. It can match or exceed the production of any machine in its class. And it's built by Ditch Witch — pioneers in vibratory plowing for over 20 years.

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3. **HYDROSTATIC GROUND DRIVE.** Hydrostatic ground drive makes the 100sx easy to operate. One lever controls direction and speed. Infinitely variable ground speed from zero to 140 fpm gives you the speed you need, adjusting smoothly without shifting. Hydrostatic ground drive and rubber tires mean better traction, less turf damage.

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5. **PRODUCTIVITY.** Size, vibrating mechanism, blade design, hydrostatic ground drive and controls make the 100sx the most cost-efficient drop plow you can buy. An optional reel carrier makes the job even easier.

6. **GET PARTS, SERVICE FAST.** Because the 100sx carries the name Ditch Witch, it's backed by the industry's largest and best parts and service organization. That means you get parts faster, with trained service specialists who are ready to serve you in the shop or in the field.

Ditch Witch built the 10-HP-class 100sx with the features you said you need in a compact drop plow. It costs less to buy, less to operate and is backed by the Ditch Witch dealer organization. It's the best value anywhere in a compact drop plow. The Charles Machine Works, Inc. P.O. Box 66, Perry, Oklahoma 73077, (405) 336-4402.

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True power tilling action removes weeds while conditioning the soil—allowing air, water and fertilizers to penetrate. Reciprocating spring-steel blades dig down into the soil at over 2000 cycles per min. Won't skate or dance to the side. Self-cleaning, non-clogging blade action. Rugged gear-drive and heavy-duty construction throughout.

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The string trimmer that set the standard for the industry is now even better, incorporating the new L-PAT series engine. You get incredible performance in a tool weighing less than 15 lbs. As a string-trimmer it’s fast and efficient, capable of day-after-day cutting of grass and weeds. Using metal blades, it’s a brush cutter that can handle the toughest vines and brush; or a tree pruner able to slice through 3-inch thick branches in a single stroke. It comes equipped with a commercial quality 6-inch TFC” (Tap-For-Cord) head with twin .095 line. The 3000LP accepts metal blades, and the great, new Model 3371 weeder-cultivator attachment.
Royal Azalea (R. schlippenbachii) is a shrubby azalea, reaching three- to six-feet in height with a rounded habit of growth. It is extremely cold-hardy and seems to thrive under slightly shady to full sun conditions. It flowers are rose-pink or magenta.

Pinkshell Azalea (R. vaseyi) flowers early in mid-May. This upright, somewhat irregular, shrub reaches five- to nine-feet in height. The flowers range from clear to dull pink. The foliage is lime-green throughout the summer months while developing good red fall color. This azalea grows well near ponds or bodies of water but needs well-drained, high organic soils.

Exbury and Knap Hill Azaleas are becoming more available in the trade. They flourish in medium shade to full sun. They have a somewhat upright-oval habit, reaching six- to eight-feet in height. Although botanically the same type of cross as Exbury, Knap Hill is usually pink and white while Exbury ranges from a brilliant red and orange to bright yellow and cream color.

Korean Azalea (R. poukhanense) is another late flowering, small azalea. It is perfectly hardy with an upright-irregular habit, reaching five- to six-feet in height and width. It thrives under mid- to full sun conditions with magenta flowers in late May. The foliage is dark green during summer, becoming orange to red during the fall.

Kaempfer Azalea (R. kaempferi) blooms during early June. This somewhat upright-irregular-shaped shrub reaches five- to seven-feet in height. It thrives in sunny to partially shady locations. The orange-salmon to red flowers are vibrant when most azaleas have finished blooming.

Generally speaking, these azaleas are low-temperature hardy, tolerate more sun than our native catawbiense, or rhododendron cultivars, have more vibrant colors, and require little or no maintenance.

They can be grown as a specimen or in mass plantings at the fringe or border for a woody or naturalized look. They thrive when planted in well-drained, high organic soils, and as companions to deep-rooted trees, such as oak, hickory, and pine.

These shrubby deciduous rhododendrons add a sparkle of color which seems to bring many woodland landscapes alive while requiring little or no maintenance. Further, they have few insect and disease problems.

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The Ride-Aire features the famous Ryan aeration system, with straight up-and-down action that cuts cores cleanly without tearing the turf. The tines are heat treated with a special process that makes them self-sharpening, allowing them to last longer than ordinary tines.

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