Headquartered in Research Triangle Park, N.C., the BASF Turf & Ornamentals business group develops and markets chemical solutions for improving turf quality through pest management. BASF Turf & Ornamentals offers a comprehensive portfolio of products specifically designed to help keep turf weed-free, disease-free and insect-free, while maximizing efficiency of labor and other resources.

Drive® XLR8 herbicide is the latest technology in providing unsurpassed crabgrass control. A proprietary, water-based formulation, Drive XLR8 is rainfast in less than an hour and provides outstanding residual control for up to 30 to 45 days with a single application. This new formulation by BASF delivers quicker uptake by the plant resulting in faster, more effective weed control. Drive XLR8 even controls crabgrass in the mature stages and improves the control of torpedograss, kikuyugrass, several broadleaves including clover and numerous other troublesome weeds.

Newly registered Onetime™ herbicide by BASF is a soluble liquid formation that controls more than 70 annual broadleaf and grassy weeds. Onetime combines the new liquid-quinclorac-based Drive® XLR8 herbicide with MCPP-P and dicamba. Its Drive XLR8 component provides fast entry into the plant, rainfastness in 30 minutes and more effective and consistent control of grassy and broadleaf weeds than other products. Turf tolerance for Onetime includes both cool- and warm-season grasses. Onetime can be tank-mixed with most other commonly used products, including pendimethalin-based Pendulum® herbicide to enhance residual control.

Trinity™ fungicide delivers unbeatable value for preventive and curative control of a broad spectrum of diseases. When used as directed, Trinity:

- Controls a broad spectrum of diseases for up to 28 days including anthracnose, brown patch, take-all patch, summer patch and dollar spot.
- Can be used on greens and fairways even during summer stress periods that limit other SI (DMI) fungicides.

Insignia® fungicide controls an exceptionally broad spectrum of turf diseases, with long-term results. In fact, Insignia has shown excellent residual control on many turf diseases, reducing your labor and materials costs and enhancing your peace of mind. When used as directed, Insignia:

- Controls key turf diseases for up to 28 days.
- Delivers better control of the top five diseases than other strobilurins.
- Suppresses dollar spot.

Emerald® fungicide works differently than anything else you've seen used to control dollar spot. Emerald disrupts fungal growth and development, halting disease development. Both the mode and site of action of Emerald differ from any other fungicides used to control dollar spot, which is why Emerald can effectively control pathogens that have developed resistance to other fungicides. When used as directed, Emerald:

- Provides unprecedented dollar spot control in virtually every major turf species, and in every region of the U.S.
- Delivers better dollar spot control in bentgrass than other fungicides.
- Provides superintendents a true resistance-management tool.
- Uses low use rates and provides strong residual control.

Curalan® EG fungicide offers economical, effective dollar-spot control in cool- and warm-season turfgrasses. Curalan also controls eight other diseases, including brown patch, leaf spot, red thread and melting out. Curalan provides strong, preventative protection with a long residual that results in significant cost savings when compared with many other fungicides.
When your job depends on green, healthy turf, you need quality products that deliver consistent, reliable results. Bayer Environmental Science offers a complete line of turf-care products that guarantee you cutting edge technology and the highest performance standards, season after season.

Bayer sets the industry’s standard for disease, insect and weed control. Whether you’re fighting unsightly weeds, destructive insects or tough diseases, you can count on Bayer products to protect your turf.

Backed by Bayer means we’re building on an already solid foundation of proven products to help you succeed.

**Merit** revolutionized grub control with outstanding preventive and curative pre-damage control from egg-lay through second instar. Merit also provides control of mole crickets and a variety of other pests at use rates lower than most currently registered turf soil insecticides. Its unique mode of action allows Merit to provide strong residual activity and superior biological performance.

**Chipco Triton** is the newest generation demethylation inhibitor (DMI) class of chemistry and offers the lowest use rates of any DMI fungicide on the market. It provides excellent control of anthracnose, dollar spot and brown patch, as well as other key diseases. Even better, when you combine Triton with other Bayer products containing StressGard®, like Chipco® Signature, you get unbeatable protection against the stress your golf course faces, even in the summer heat.

**REVOLVER** provides post-emergent control of a variety of unsightly grasses, including Poa annua, goosegrass and others, in bermudagrass and zoysiagrass. Revolver also smoothes transition by controlling clumpy ryegrass and Poa trivialis. Based on foramsulfuron, Revolver’s unique mode of action helps manage resistance.

**Tartan® fungicide** delivers lush, healthy, beautiful turf along with superior, 21-day control of dollar spot, brown patch and a broad spectrum of other diseases. Developed specifically for golf courses, Tartan contains StressGard™, which helps fight turf stress and manage turf health even in the worst summer heat. Tartan has contact and systemic action for both preventive and curative control, making it an excellent choice for fairways, greens and roughs.

**RONSTAR® FLO** offers greater flexibility and ease of application. It disperses easily in water and mixes well in the spray tank. Ronstar Flo is registered for use on dormant established bermudagrass, zoysiagrass and St. Augustine-grass golf course turf. The product provides impressive preemergent control of goosegrass, crabgrass, annual bluegrass and other tough turf weeds, such as annual sedge.

**Allectus®** is a dual-action insecticide, providing broad-spectrum insect control both above and below the soil surface. The product controls white grubs as well as mole crickets, army-worms, cutworms, billbugs and many more turf pests. Available in a variety of convenient formulations, Allectus provides broad-spectrum insect control with minimal environmental impact.

**Chipco Signature** is the foundation of summer and winter decline programs. With multiple applications before turf stress hits, Signature activates turf plants’ natural immune systems to ward off diseases in cool- and warm-season turf, improving turf quality. Signature contains StressGard™ technology and makes an excellent tank mix with other fungicides for season-long healthy turf.
For more than 70 years, Cleary has supplied the fine turf and ornamental industries with superior quality plant protection products, using the most up-to-date technology. First-hand experience with Tara Greens, our corporate-owned and maintained golf course, helps us appreciate the challenges encountered by turf and ornamental professionals. Our technical expertise in solving problems related to diseases, insects or application needs is our outstanding service contribution to the industry. We participate nationally in numerous trade shows, education conferences and field days. Should you have a question or a problem, technical support can be obtained through our recently updated web site, the Field Technical Sales Representative nearest you or through our toll-free number. Our experts will be happy to provide the guidance necessary to answer any questions.

**3336 PLUS with ClearTec™ Activation Technology™** is a highly effective broad-spectrum fungicide for fairways. 3336 PLUS delivers enhanced efficacy and up to 50% longer-lasting disease control on golf fairways compared with any other thiophanate-methyl product, all while using less active ingredient at effective use rates. 3336 PLUS provides broad-spectrum disease control for fairway diseases such as dollar spot, brown patch, grey leaf spot and pink snow mold.

**Protect DF** is an economical contact fungicide effective against foliar turf diseases. A 75% mancozeb formulation, Protect is used for the control of 13 turf diseases.

**26/36** is a premixed combination of two trusted turf and ornamental fungicides, iprodione and thiophanate methyl, which provide better resistance management with long lasting disease control. The contact and systemic activity of 26/36 is effective against a broad spectrum of diseases such as dollar spot, brown patch, anthracnose, leaf spot, fusarium patch and zoysia patch.

**Endorse™ Translaminar Fungicide for Turf** is a broad-spectrum fungicide with an exclusive mode of action. Endorse provides excellent control of Patch diseases such as Yellow and Brown Patch and is also a great performer against Anthracnose and Fairy Ring. The unique chemistry in Endorse makes it a great rotational fungicide to help manage resistance. Endorse is “soft” on grasses during hot and stressful conditions because Endorse has a unique mode of action that doesn’t regulate growth of turf in the summer. Rotating Endorse into your summer fungicide program will help you manage summer stress—and control the toughest diseases on your tees, greens and fairways.

**Spectro™ 90 WDG Turf & Ornamental Fungicide** combines two top disease-controlling products, Cleary 3336™ and Daconil, into one easy-to-use water-dispersible granular formulation. Spectro saves you the time, trouble and worry of tank mixing. Spectra’s unique formulation provides both contact and systemic activity for both Dollar Spot and 15 other tough diseases.

**Alude™ Systemic Fungicide** is your solution to the prevention of Pythium and Anthracnose on fine turf. Alude is a unique, stable liquid formulation of the phosphonate class of fungicides that does not contain aluminum like some of the other pythium materials. Alude, with its rapid foliar uptake and complete systemic activity, prevents Pythium right down to the plant’s roots. In fact, Alude is so fast-acting it can be applied preventively several days or even hours before a suspected outbreak of Pythium blight, saving you time and labor, but more importantly, saving your greens and tees.
DuPont is a science company. Founded in 1802, DuPont puts science to work by creating sustainable solutions essential to a better, safer, healthier life for people everywhere. The core values of DuPont are the cornerstone of who we are and what we stand for. They are: safety and health, environmental stewardship, highest ethical behavior, and respect for people. DuPont Professional Products brings the company's tradition of science, innovation and safety to the turf and ornamental industry.

**DuPont™ Acelepryn™ insecticide** is proven to control every key turf-damaging white grub species and other key pests such as the annual bluegrass weevil, billbugs and caterpillars. Turf professionals can now control multiple pests with a single, early application, eliminating at least one treatment to control surface feeders and saving time and money later in the season. Acelepryn™ is a new class of chemistry that provides excellent control at the lowest application rate ever utilized for white grubs. Acelepryn™ has the lowest water solubility of any white grub control product and a reduced-risk classification from the EPA. The liquid formulation of Acelepryn™ is available now. In time for the 2009 grub season, look for the granular formulation as well as fertilizer with Acelepryn™.

**DuPont™ Provaunt™ insecticide** offers a new mode of action to quickly control a wide range of caterpillars and other key pests. It stops feeding in hours—even minutes—and that stops damage to your turf and ornamentals. In addition to fast and effective control of targeted pests, Provaunt™ offers several unique features that save you time and money without compromising on performance: low application rates, reduced-risk active ingredient, and no buffer zones required.

**DuPont™ Advion®** fire ant bait gets your customers back on their turf faster—just 24 to 72 hours for total colony control. That's because Advion® is based on a new class of chemistry powered by the MetaActive™ compound. This unique, high-consumption bait formulation quickly attracts fire ants; MetaActive™ attacks the insects' nervous system, resulting in paralysis, then death. Advion® exhibits secondary effects when shared among fire ants, including the queen. Head-to-head trials against leading competitors prove it: Advion® averaged 98 percent control just three days after treatment.

Nothing stops late-stage mole crickets faster than DuPont™ Advion® mole cricket bait. The unique bait matrix, combined with the powerful, non-repellent active ingredient indoxacarb, is fast and effective against hard-to-control mole crickets when applied during spring and late summer/fall. University of Florida research shows nearly 95 percent reduction in turf damage using Advion®. Even after an unexpected rainstorm, Advion® mole cricket bait outperformed competitors.

Premier courses deserve premier treatment with DuPont™ TranXit® herbicide. University field trials demonstrate that it aids in spring transition and fall overseeding programs. Spring use of TranXit® controls ryegrass to give your bermudagrass the opportunity for more rapid and complete re-establishment after winter dormancy. Then, follow up with a fall application of TranXit® to control annual bluegrass prior to overseeding for the winter.

Premier courses deserve premier treatment with DuPont™ TranXit® herbicide. University field trials demonstrate that it provides effective control of *Poa annua* for overseeded or non-overseeded turf in the fall. And a spring application of TranXit® controls ryegrass to give your bermudagrass the opportunity for more rapid and complete re-establishment after winter dormancy. TranXit® was developed by DuPont and features low application rates.
Quali-Pro
4515 Falls of Neuse Road Suite 300
Raleigh, NC 27609
Phone: 800-979-8994
Fax: 800-979-4075
Web site: www.quali-pro.com

Know the Sign.

Greater Than or Equal To. Quali-Pro products feature formulation quality second to none for performance results equal to the competitive brands they replace. Backed by the strength of Makhteshim-Agan Industries, Quali-Pro is focused on quality, value, performance and the success of their customers in the professional turf and ornamental industry.

Quali-Pro T-NEX™ 1 AQ—plant growth regulator’s micro-emulsion concentrate is used to manage growth and improve quality and stress tolerance in turfgrass.

Quali-Pro Prodiamine 65 WDG Herbicide for pre-emergent broadleaf and grassy weed control. Can be used spring or fall.

Fosetyl-Al 80 WDG delivers long-lasting, broad-spectrum preventive control of diseases such as Pythium and Phytophthora in turf and ornamentals and bedding plants.

Quali-Pro Dithiopyr 40 WSB Herbicide with both pre- and early-post emergent control of crabgrass. Non-staining formulation.

Quali-Pro Ipro 2 SE Fungicide for the prevention and control of certain diseases such as Snow Mold, Brown Patch, Anthracnose on turf grass and ornamentals.

Quali-Pro Imidacloprid .5G or 75 WSB Insecticide provides foliar and systemic insect control in turfgrass and landscape ornamentals. Control white grub larvae, European crane fly, cutworms, mole crickets and more.
Floratine Products Group, based outside of Memphis, TN, uses a highly trained distribution team that employs a quantitative-based approach to developing proactive turfgrass nutrition programs and innovative solutions for turfgrass challenges. With data from scientific analysis, Floratine representatives work side-by-side with superintendents and turf professionals to manage programs that not only alleviate troublesome turf challenges but also strengthen turf so it can resist day-to-day stress and stay healthy.

Floratine is a company managed by former superintendents and experts in agronomy, and their main goal is to help turf professionals with new solutions to old problems and simpler ways to tackle turf issues. The backbone to Floratine's products is simple: Only the finest and purest raw ingredients are ever used in the development of its products because the company knows stressed turf does not need the extra challenge of processing less than optimal ingredients to survive.

With hot products like the new Turf Action Plan (TAP) Pack system, and new, improved ProteSyn, superintendents can look to Floratine throughout the growing season to help them keep their turf strong and healthy year round.

**TAP Pack system**
Floratine's Turf Action Plan (TAP) system helps superintendents combat problems and address issues like aerification recovery, fairway color, heat stress, mining, spring start, tournament prep and winter strength through the use of targeted, specific applications of Floratine products.

To help make the TAP program even more accessible and user-friendly, Floratine developed the TAP Pack system. TAP Packs allow superintendents to easily prevent and/or identify and treat specific turf challenges in an easy-to-use format premeasured to cover one acre of turf.

**ProteSyn**
ProteSyn combines carbohydrates, proteins and essential vitamins to help plants improve photosynthetic efficiency, helping superintendents battle summer heat stress by aiding and enhancing the completion of photosynthetic activity, encouraging healthy cell division, respiration and energy conservation.

The carbon-rich compounds in ProteSyn contribute directly to plant energy reserves, mature protein production, complete amino acid resources, enhanced cell division and the appropriate carbon-to-nitrogen ratio.

**Carbon K**
Carbon K uses Floratine's proprietary Carbon Power technology to enhance the uptake, translocation and utilization of key nutrients. Carbon K combines magnesium and a low-salt, non-burning source of potassium to ensure proper cell function and chlorophyll formation.

**Renaissance**
Renaissance ensures rapid uptake and makes available critical nutrients that are often deficient in turfgrass. Renaissance is the clear choice for promoting proper plant nutrition and delivering consistent, improved turf color and quality.

**Perk Up**
Perk Up's blend of calcium, simple and complex carbohydrates and naturally occurring, organic compounds provides rapid relief to turf under photosynthetic and respiration stress. Perk Up includes elements required for wilt resistance and recovery, root growth and cellular strength.
Jacobsen®, has been one of the most trusted names in golf and turf maintenance since 1921, providing the finest conditions for superintendents across the nation for 87 years and counting. Jacobsen has always been a company synonymous with innovation and quality, as the first company to introduce the greens mower, the triplex riding greens mower, the light fairway mower, the Turf Groomer® and modern electric mowing technology. At today's Jacobsen, customers are the first priority. Designing the best equipment and backing it with the industry's best service is what Jacobsen is all about. We listen to the customer and provide superintendents with everything they need on their course for when performance matters.

AR-522 rotary mower
For golf course superintendents looking to handle heavy volumes of grass and maintain the finest possible quality-of-cut over difficult terrain, the new AR-522 rotary mower is the answer. No other mower in its class can match the power, the cut or the versatility.

- Revolutionary new TrimTek deck with exclusive downdraft blades keeps clippings suspended longer for exceptional mulching results.
- Exclusive three-tiered discharge opening distributes clippings more evenly for a superior after-cut appearance.
- Increased deck volume allows the AR-522 to cut in more severe conditions.
- Best-in-class traction capability with on-demand control from the operator station.

- More horsepower per width-of-cut than any mower in its class. Coupled with the new and improved decks and climbing system, it allows the AR-522 to lead the category in climbing performance.
- Easily converts from discharge to mulch in minutes with a single wrench.
- 2-post TOPS standard (ASAE S547).

Quad Tine Holder for GA-24
A new aeration accessory from Jacobsen allows superintendents to more than double their productivity during annual core aeration, saving both time and money. By introducing the new quad tine holders for its Greensaire 24 aerator, Jacobsen is adding to its full line of industry-leading aeration equipment with a product that offers better hole quality and removes nearly 12 percent of the area covered with each pass. With just two aerations per year, superintendents can remove more than the USGA recommendation of 20 percent of greens area to sustain maximum playability and high-level course conditions.

"With the Jacobsen quad tine holders on the GA-24, you remove more in just two passes than what it takes other brands to remove in three or four passes. This is significant when you add up the lost revenue of closing the course down during core aeration," explains Rob Arthur, Jacobsen product manager.

Fitted with quad tine holders, the GA 24 removes 80 percent more material per pass than comparable machines from other leading manufacturers. With its best-in-class hole quality and staggered grid pattern, the coring holes will also heal more quickly and be less noticeable in a shorter period of time.

"The quad tine holder changes tine spacing to 1 inch by 1 inch," Arthur says, "providing the most productivity of any aerator in its class and saving courses substantial amounts of time and money by eliminating at least one aeration per year, if not more."

The quad tine holders are available from authorized Jacobsen dealers. The GA 24 is available with a windrow attachment to prevent operators from running over cores during aeration.
**HOT PRODUCTS**

John Deere Golf offers quality agronomic products, precise irrigation systems and innovative equipment for golf course construction, renovation, and ongoing mowing and maintenance. As the official golf course equipment and irrigation supplier to the PGA TOUR, John Deere brings tournament-level quality to today's courses, giving golf course superintendents the products, expertise and support they need.

The **John Deere 2500E Hybrid Riding Greens Mower** was designed to respond to tough demands with an innovative solution. As the industry's first hybrid greens mower, the 2500E features an electric reel drive system that eliminates 102 potential leak points, produces lower sound levels and can increase fuel savings by 30 percent, while maintaining the highest quality of cut.

- Three 22-in. cutting units are available with either seven- or 11-blade reels.
- Optional smooth or grooved front roller.
- Height of cut can be adjusted from 5/64 inch to 1.25 inches.
- Standard patented John Deere White Box™ controller, allowing quick, on-board electrical diagnosis.

**John Deere Golf's 7400 TerrainCut Trim & Surrounds Mower** includes a Width-on-demand system and best-in-class horsepower. Additionally, it is designed to maximize operator comfort and ease of use, while providing better hill-climbing and traction with the exclusive GRIP All-Wheel Drive Traction System.

- Only mower capable of extending all the way to 74 inches and back to 68 inches width-of-cut at the touch of a button.
- Right or left deck can independently shift a full 15 inches to give you the flexibility you need for every situation.
- 37.1 hp, turbo-charged diesel engine.
- The double-acting yoke system allows the deck to pivot at two points, helping the mower closely follow contours.

**John Deere's 8000 Series PrecisionCut Fairway Mowers** reflect customer input through their power, traction and cut quality, as well as improved comfort and ease of use. Innovations include more precise steering and a best-in-class hydraulic down-pressure system. And, the GRIP All-Wheel Drive Traction System results in improved traction and better hill-climbing ability.

- Featuring more power, but less noise and emissions.
- Utilizing 22-in. ESP cutting units with 7-in. diameter reels.
- Two pressure-sensing, flow-compensating backlapping valves enhance the quality of cut.

**eAurora Professional Irrigation** is John Deere's Internet-based irrigation management system. It includes all the functionality of Aurora Professional Central Software that users have come to count on, including flow management capabilities, allowing superintendents to control water volume from anywhere.

- Remotely monitor sites; eAurora is accessible from any Internet-capable computer or PDA, giving users an added level of control and freedom.
- Abolishes time-consuming software upgrades and programming; updates are loaded seamlessly when the user logs in.
- Optimized for a small-screen format that can run quickly on a handheld device.
- Allows programming, program writing and alarm log review.

John Deere Golf now offers a new **Supreme Golf Seed** line created by LESCO. This comprehensive product line features seed for fairways, tees, greens and roughs, which incorporates advanced generation turfgrass varieties. Varieties include elite, low-mow Kentucky bluegrasses; gray leaf spot resistant perennial ryegrasses; and high endophyte fescues for improved drought tolerance and insect resistance. Also included are creeping bentgrass varieties with excellent National Turfgrass Evaluation Program performance, outstanding seedling vigor and improved disease resistance.

- Unique characteristics are stable through many years of growth.
- Integrity has been maintained through the planting, growing, harvesting, cleaning and blending process.
LebanonTurf, a division of Lebanon Seaboard Corp., offers several product lines dedicated to the needs of green industry professionals. Golf course superintendents, sports turf managers and landscape professionals know they can count on LebanonTurf to provide the products they need to thrive in today's competitive business environment. A devoted network of dealers and distributors add value with their outstanding service, local knowledge of agronomic needs, and insight into their specific markets. Recognized as an industry leader for our innovative technologies, we understand the bottom line is delivering value to the customers we serve. At LebanonTurf, we are improving the way professionals care for turf.

Country Club

Country Club is Lebanon Turf's premier homogeneous methylene urea fertilizer line that combines traditional high-WIN products with LebanonTurf's cutting edge Composite Technology granulation process. You won't find a more efficient nitrogen package in a homogeneous fertilizer today.

ParEx

ParEx blended fertilizer contains IBDU slow-release nitrogen, the agronomic benchmark of universities for nearly 30 years. Because IBDU delivers the highest amount of available WIN per pound of nitrogen, just one application provides steady green-up with no risk of surge growth. With Par Ex, you'll experience less leaching, less thatch buildup and less surge growth, regardless of turf type, all season long.

MESA

MESA® is the first nitrogen source to combine ammonium sulfate with methylene urea in a single particle. The result is an effective and efficiently controlled nitrogen source. MESA provides a consistent, brilliant color with virtually no burn potential. Unlike SCU, MESA does not rely on a coating or lose its slow-release attributes when cracked. With MESA, even if cracked, the granule still maintains its slow-release properties. That's why half a piece of MESA is still MESA! (Typical Nitrogen Release: 6-9 weeks)

IsoTek

IsoTek® provides a versatile, controlled-release source of nitrogen ideal for most soil types and conditions. Its dual-release nitrogen package of IBDU® slow-release nitrogen and Meth-Ex 40® methylene urea is created with patented Composite Technology®. You'll experience better particle dispersion, reliability and nitrogen efficiency, providing consistent results time after time.

NX-PRO®

At LebanonTurf, we've developed an innovative fertilizer line that offers a variety of premium nitrogen sources. Whether you choose the high-efficiency of Meth-Ex 40, the brilliant color of MESA®, or a combination with Expo's extended potassium sulfate, the outcome will be healthier, sturdier stand of turf. It all starts with a bag of NX-PRO.
The Oregon Fine Fescue Commission promotes quality Chewings and creeping red (FINE) fescues. The Oregon Tall Fescue Commission promotes Oregon quality TALL fescue seed. Both are grown in Oregon, the Grass Seed Capital of the World, by professional seedsmen. More grass seed is produced in Oregon for a reason: we have the best growers and growing conditions in the world.

Turf maintenance professionals know that starting with the best seed available pays dividends in less maintenance, and a healthy, visually appealing turf. Every box, bag or bucket of seed has an attached analysis tag stating the origin of the seed inside. When you buy "ORIGIN: OREGON" seed, you're assured that it's a premium quality product produced in the Grass Seed Capital of the World.

Fine and tall fescues are beautiful to look at, but the real beauty is in their low maintenance and environmental friendliness. Chewings and creeping red fescues are naturally shade and drought tolerant, and require less fertilizer than other cool-season grasses. They are often mixed with perennial ryegrass and Kentucky bluegrass for added shade tolerance and fine turf quality. Some uses include golf course roughs, home lawns and parks.

Many more golf courses are capitalizing on "the dunes look" of windswept fine fescue seedheads that result from mixing several fine fescues. This results in a stand that requires minimal attention and is typically mowed once a year in the fall.

Some links-type courses mow their Chewings-type fescues to fairway height, and even to ¼-in. for putting greens. When cut to fairway and greens height, colonial bentgrass is typically mixed with the fine fescue.

Deep-rooted Tall Fescues are drought, shade and wear tolerant. They also stabilize the soil, and when established, they are ideal for golf course roughs and cart path areas. Their heat tolerance helps around bunker faces, where sun reflecting off the bunker sand makes other species uncomfortable.

Many newer fine and tall fescues contain endophytes useful in repelling leaf-eating insects without the use of chemicals. Dr. Bill Meyer at Rutgers University made the following comments about fine and tall fescues, present and future:

- The advantage tall fescue has is that it is wear tolerant, it's shade tolerant which is a problem in the (golf course) rough and once you get a tall fescue established, it's a very tough, wear tolerant grass. We're working on the establishment, density and the compactness, which means reduced mowing for the homeowner (and superintendent) if they're more compact. We're also looking at color retention.

- Tall fescue requires more fertilizer than fine fescue. Fine fescue is exceptional in that it holds its density with less fertilizer.

- The big advantage fine fescue has is the fact that we have new endophytes that are conveying disease resistance, and they're more heat tolerant and higher quality.

- Because we now have better creepers and better Chewings types, and they have a lot of shade situations, it would be wise for lawn care companies to include them in a lawn mixture.

- I did a blend study using one-third each Chewings, creeping and hard fescue, which is commonly found in golf course extreme roughs and around bunkers, and they work very well together. It was great.

- Chewings fescues take the short height of cut demanded for tees, fairways and greens on Scottish links-type golf courses, where creepers and hard fescues will survive at a height of 1 ½-in. and higher. Chewings fescue mixed with colonial bentgrass stabilizes sandy soils and resists dollar spot if it occurs in the bentgrass.