service for products could suffer because there wouldn’t be enough money for manufacturers to fund them.

Yarborough admits that branded manufacturers give back more to the industry in terms of money and time than generic companies like Sipcam Agro. However, he doesn’t apologize for it.

“We give it back to the superintendent and the golf course owner in terms of cost savings, and that’s the bottom line,”

Yarborough says, “You won’t find us with 35 booths at the GCSAA show — we’ll be there with one booth. You won’t find us with 10 pages of media in your magazine — we’re not there with any.”

Fisher believes the most successful generic products will be the ones that have created their own brands, much like Grif-fin LLC has done with Concorde, he says.

“In other words, those successful generic products are not going to come out as chlorothalonil X,” Fisher says. “They will try to establish their own identities and their own levels of quality.”

Some generic suppliers believe they’re at a different level than other generic manufacturers. These same suppliers believe all generic manufacturers shouldn’t be lumped together when they’re targeted for alleged poor customer service and insufficient research for their products.

For instance, Yarborough believes Sip-cam Agro has more to offer than other generic suppliers. He says buyers need to be aware of some generic companies who can’t market their products based on solid performance data garnered from studies.

“We have more than 200 studies demonstrating our product [Echo’s] efficacy on various crops, including turfgrass,” Yarborough says. “But in some cases, a generic producer may not be able to provide data. Superintendents need to use discretion in their purchasing decisions, but they should be open to alternatives.”

Yarborough says more generic manufac-turers — “names you don’t recognize” — will soon surface. “There will be a blend of post-patent and branded products.”

While Strickland questions the business practices of some generic manufacturers, he realizes that post-patent products will remain part of the business. In fact, he expects more basic manufacturers to embrace generic manufacturers.

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BASF Professional Turf’s parent company, BASF Corp., has already done that. In 1998, it acquired a majority stake in Micro Flo, a Lakeland, Fla.-based company that formulates and markets a range of generic crop protection products.

Top Pro Specialties, a generic supplier of pesticides to the turf industry, is also a unit of BASF. In fact, BASF is going through an integration process with Top-Pro Specialties that will involve many of the TopPro products becoming an integral part of the BASF Professional Turf & Ornamental group.

One thing is for sure, the chemical market is a busy place these days for its manufacturing players.

“It’s exciting because you’re participating in the dynamics of the market,” Strickland says. “You have the opportunity to put a stamp on the market and say, ‘Hey, I was there.’

### Product Portfolio

Some examples of branded products that now have generic counterparts.

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>TYPE</th>
<th>BRAND/COMPANY</th>
<th>POST-PATENT/COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glyphosate</td>
<td>Herbicide</td>
<td>Roundup/Monsanto</td>
<td>Prosecutor/Nufarm</td>
</tr>
<tr>
<td>Pyrethroid</td>
<td>Insecticide</td>
<td>Astro/FMC Corp.</td>
<td>Permethrin Pru/Top Pro Specialties</td>
</tr>
<tr>
<td>Mancozeb</td>
<td>Fungicide</td>
<td>Fore/Dow Ag</td>
<td>Junction/Griffin LLC</td>
</tr>
<tr>
<td>Chlorothalonil</td>
<td>Fungicide</td>
<td>Daconil/Syngenta</td>
<td>Concorde/Griffin LLC</td>
</tr>
<tr>
<td>Mefenoxan</td>
<td>Fungicide</td>
<td>Subdue Maxx/Syngenta</td>
<td>Mefenoxan 2/Sipcam Agro USA</td>
</tr>
</tbody>
</table>

### About Patents, Brands and Generics

- A patent is a document issued by the U.S. federal government that grants its owner protection from others from making, using or selling the invention claimed in the document for 20 years.

- It can take seven to 10 years to obtain EPA approval for a new pesticide. It can cost an average of $50 million and up to $100 million to bring a new pesticide to market.

- After a patent’s expiration, a generic manufacturer can offer to pay compensation for EPA data submitted by the basic manufacturer for a particular pesticide. A generic producer of an active ingredient must demonstrate to the EPA through tests that its product is virtually identical to the basic manufacturer’s product.
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Continued from page 38

on Dylox, ensuring that superintendents continue to have access to excellent rescue treatment for grubs.

This means we invest — heavily — to ensure that superintendents continue to have the tools they need to succeed in their jobs. We want to ensure that they have solutions, not only for existing problems, but for future problems as well.

Our development team works hand in hand with researchers at local universities around the country to better understand the issues faced by superintendents and to solve these problems. They do this by bringing new technology to market as well as by adding additional uses to existing labels.

Our corporate goal is to bring at least two new active ingredients to the market each year. This is what basic manufacturers must do if we want to be relevant to you today and in the future. If we fail to bring new technology, we will soon find ourselves trying to solve new problems with old solutions that may not be successful.

What does all this mean to superintendents? We could spend hours elaborating, but we know and you know that other manufacturers are nearly a mirror image of us.

What makes us different? Consider that superintendents are under immense pressure and have many challenges and many alternatives to help them meet these challenges. At Bayer Chipco, we understand these issues and provide solutions to the problems that superintendents face every day.

One real-life example is our improved 26GT formulation, providing both preventative and curative control at one rate — allowing superintendents more flexibility and superior performance than the old 26019 formulation.

We also worked with West Coast scientists to identify a new *Poa Annua* seed head suppression control with Proxy. We were able to add a new Chipco Signature label for preventative anthracnose control, providing help in basal rot management.

However, providing high-quality products that work is the price of entry for any manufacturer in this market. It is our responsibility to differentiate ourselves. To do so, we must go beyond the price of entry. We must add value beyond product solutions and, ultimately, we must continually earn superintendents’ business.

This is the commitment from the entire Bayer Chipco team, from the highest level of management to our field sales force. We are challenged to be remarkable, to make you remarkable.

Davis is Southern Region Manager for Bayer-Chipco Professional Products.
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ferred by companies like Griffin LLC. Essentially, every company in business today is producing and marketing these materials. In fact, more than 70 percent of today’s turf market active ingredients are post-patent, and there is now no company selling exclusively proprietary or exclusively post-patent chemistries.

Another remarkable fact is that quite a few companies like Griffin LLC and TopPro Specialties, which are noted for selling post-patent products, are also leaders in supporting the industries they serve. In many cases, they contribute a greater percentage of their sales to industry support than the multinationals. The turf industry is no exception and TopPro Specialties, Griffin LLC and other similar companies are strong supporters of the GCSAA, Responsible Industry for a Sound Environment (RISE) and the Turf and Ornamental Communicators Association (TOCA).

In fact, Griffin LLC was the first chemical company to contribute $250,000 to GCSAA’s “Investing in the Beauty of Golf” campaign. That made Griffin the initial crop protection products company to become a member of the “Old Tom Morris Society,” the GCSAA Foundation’s highest contributor level.

In companies like Griffin, research-and-development funds can be focused on improving products that can be used today, not on the discovery of agricultural products, which may or may not have a fit in the green industry. This means we can offer the industry better product support, better services, newer ideas and competitive pricing along with better quality and selection.

But it isn’t just superintendents who are discovering the superior value and performance of post-patent products. In many cases, this hasn’t gone unnoticed by certain major manufacturers of branded products. That’s why, regrettably, some of them have taken extreme measures to thwart superintendents from having access to the newer formulations and brands. Some even subject distributors to significant financial penalties if they offer you a choice. This forces a number of superintendents to seek out other distribution channels in order to procure the products they want.

If you’re considering a post-patent material for the first time and want to compare the product’s performance to the branded one, check university trials. In most every case, you’ll find equal or superior performance. The bottom line is that post-patent products offer many advantages over brands. In today’s environment, anytime a superintendent can combine equal or superior performance with a more economical price, the choice is simple.

Towne is Business Director for Griffin LLC’s Specialty Products Group.

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Maximum power for season-long grub control.

Molecules: The Cost Factor

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Yarborough begs to differ with the poor service label. Bob Yarborough, business manager of turf and ornamental for Sipcam Agro USA, says the rap is overblown. He says Sipcam Agro offers outstanding technical support, headed by John French, the company's technical director.

"He has as much expertise with chlorothalonil as anybody," Yarborough says. "If someone has a problem or concern with our products, formulations or molecules, French is a resource anyone can talk to."

Yarborough downplays the service issue because he says it's not that big of a deal, at least in Sipcam Agro's case.

"Quite frankly, we don't have many problems [with our products]," he says. "It gets less than 10 service calls a year. Is there a need for service? Maybe there is, but if the product is as proven and known as our Echo chlorothalonil, you just don't need it."

Distributors Play a Key Role in this Game

First things first about private-label products offered by national distributors, such as Cleveland-based LESCO. Not all of the company's private-label products are generic. Many are made by basic manufacturers, and LESCO has worked out agreements with them to sell their products under the LESCO name.

The strategy has been successful over the years, says James Talia, LESCO's category director of control and combination products. LESCO tests products thoroughly through universities and internally before marketing them. LESCO must also treat the products as its own and carefully manage them, especially in terms of service.

"In essence, we've formed our own branded products," Talia says. "Superintendents feel comfortable with what they're buying from us. They don't go to bed at night worrying about whether they put the wrong products out on their golf courses."

Whether national or regional, distributors play a large role in establishing a level of comfort for superintendents when it comes to selling branded and/or generic products. It's simple: If a superintendent trusts a distributor, he or she will listen to what the distributor has to say about certain products.

"Superintendents get the same service from us whether it's a LESCO brand or a manufacturer's brand," Talia says. "They get the same commitment from us on a service and a customer level that they are accustomed to. And we continue to strive to make that service and contact with our customers better."

Bob Yarborough, business manager of turf and ornamental for Sipcam Agro USA, a Roswell, Ga.-based manufacturer and supplier of generic fungicides and herbicides, says the business is about relationships, and distributors play a huge role.

"We're in key markets with key distributors that have personal relationships with superintendents, and they help superintendents grow their grass better by programming the use of our products," Yarborough says. "Relationship selling is what gets the job done in the golf industry."

— Larry Aylward, Editor

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CIRCLE NO. 133
Seeded Bermudas Gain Ground

By Michael A. Raciborski and Dave Han

In the southern United States and other areas with environments that favor warm-season grasses, bermudagrass is a popular selection for golf courses. Bermudagrass is a fast-growing, sod-forming perennial that forms a dense, uniform surface with excellent wear tolerance, quick recovery rate and good surface grip. Currently, the primary choices for high-quality bermudagrass are the vegetatively propagated cultivars such as Tifway. These do not produce viable seed and are readily available in sod or sprig form.

In recent years, many new cultivars of seeded bermudagrass have become available to the public through genetic research and plant-breeding efforts. Common bermudagrass was introduced in Yuma, Ariz., around 1900, but did not become certified as Arizona Common until 1963. During the 1980s, advancements were made with the release of improved cultivars such as Guymon for cold tolerance and Numex Sahara for overall quality. Numex Sahara is considered the first improved seeded bermudagrass bred specifically for turfgrass use.

Also during the late 1990s, great advancements were made with the introduction of Riviera and Princess. These new cultivars have shown similar quality to the vegetative hybrids. From the improved performance and promising results of these cultivars, the future is bright for development of better seeded bermudagrass varieties. A major concern with seeded cultivars is their ability to survive the winter of the establishment year. Severe winterkill is a possibility in areas with harsh winters.

Reduced cost and ease of planting are some of the benefits of using seeded cultivars rather than the vegetatively propagated cultivars. One of the primary concerns about the seeded cultivars of bermudagrass is whether they offer the same high quality characteristics, rapid recovery and growth rate as the hybrids.

We tested new seeded cultivars of bermudagrass to see if they have suitable shoot density, color/quality and rate of coverage for use on golf courses.

We studied some of the new seeded bermudagrass cultivars during the summers of 2001 and 2002 in Auburn, Ala., and Crossville, Ala. The objective of this research is to examine whether the new seeded cultivars of bermudagrass have a suitable shoot density, color/quality and rate of coverage for use on golf courses.

Two separate experiments were established in June and August 2001 at the Auburn University Turfgrass Research Unit (AUTGRU) in Auburn, Ala. Each research area was fumigated with methyl bromide three weeks prior to seeding. Plots were seeded with six different cultivars of bermudagrass at a rate of 2 pounds per 1,000 square feet on June 6 and Aug. 16, 2001.

The six cultivars of seeded bermudagrass used were Princess, Numex Sahara, Blackjack, Sydney, Bermuda Triangle and Sultan. On June 6, Tifway was established through sodding.
At the Aug. 16 planting, Tifway was sprigged at 5 bushels to 10 bushels per 1,000 square feet. Immediately after seeding, the plots were covered with a cotton row cover cloth to help retain moisture and reduce washing of seed from the plots. Immediately after germination, the covers were removed and an initial fertilizer application of greens-grade fertilizer (18-3-18 at 1 pound per 1,000 square feet) was applied. Subsequent nitrogen fertilizer applications (ammonium nitrate in a 34-0-0 ratio) were applied at a rate of 1 pound per 1,000 square feet per week until 100 percent grass coverage was achieved. After establishment, a rate of 1 pound nitrogen per 1,000 square feet per growing month was applied.

When the grass reached a height of 2 inches, it was mowed with a rotary mower at 1.5 inches to 2 inches three times a week. Irrigation and pesticide applications were made as needed during establishment and maintenance.

This test was also repeated a second year in the summer of 2002 at the Sand Mountain Substation in Crossville, Ala. Nine seeded cultivars of bermudagrass were planted at Sand Mountain on May 22 and Aug. 16, 2002. The same six seeded cultivars from above were planted, with the addition of three more: Riviera, Guymon and Yukon.

The procedure above was followed during the establishment at Sand Mountain. Instead of methyl bromide, two applications of glyphosate were applied to prepare a clean seed bed.

After germination and planting dates at both sites, shoot density was recorded once a month from two months after planting until the grass entered winter dormancy after 100 percent coverage was reached. Shoot density was also recorded for the summer following the 2001 AUTGRU planting in 2002. Shoots in three 2.25 inch-diameter plugs from each plot were counted by hand.

Starting after the plots reached 100 percent coverage, color and quality ratings were taken by visual observation once a month. As fall approached, fall color retention was noted. Winterkill and spring green-up were both evaluated in spring 2002. They will also be evaluated in the spring of 2003 for the 2002 plantings.

**Results—2001**

During June establishment in 2001, all of the seeded cultivars emerged at the same time and had complete coverage within six weeks of planting. In the second planting (Aug. 16) that year, the seeded cultivars emerged quicker, with complete coverage within four weeks after planting. The sprigged Tifway took nine weeks to obtain complete coverage.

Shoot density of each cultivar was evaluated three months after the June planting. Tifway and Princess had the highest shoot densities, Blackjack was slightly lower, and the rest of the cultivars were slightly less, but similar to each other. Quality was also rated during this time, and once again Tifway and Princess were superior, with Blackjack following, and then the rest of the cultivars. As fall approached color retention was noted, and no differences among all the cultivars were observed.

**Results—2002**

As the bermudagrass began to come out of winter dormancy, spring green-up was recorded with all of the seeded cultivars greening up at a similar rate. The vegetative cultivar Tifway was the exception to this and was completely green one month prior to the seeded cultivars.

Also after the grass came out of dormancy, winterkill was evaluated. Winterkill is a major concern the initial winter after establishment for seeded bermudagrass cultivars. The two studies revealed that an early plant date is important when establishing the variety by seed.

Tifway and Princess planted the previous June showed no signs of winterkill, while Blackjack had the highest rate at 20 percent. All other cultivars showed minimal winterkill.

Plots planted in August were more susceptible to winterkill. For the August planting date, Tifway was the only cultivar with no winterkill. Princess and Sydney showed the least amount of winterkill among the seeded cultivars with less than 10 percent.

All the other cultivars showed similar susceptibility to winterkill (25 percent to 38 percent),