BRIEFS

ELYEA JOINS TEE-2-GREEN

HUBBARD, Ore. — Richard H. Elyea has joined Tee-2-Green Corp. and Turf-Seed, Inc. as a turfgrass consultant to provide domestic and worldwide site-specific recommendations on turfgrass, agronomic and environmental issues for golf course architects and designers. Elyea was a golf course superintendent in Iowa and Nebraska for 10 years. Elyea may be contacted here at 800-547-0255, or directly at his Columbus office, 614-793-8644.

Richard Elyea

FUNKHOUSER TO REP SANDOZ

DES PLAINES, Ill. — Sandoz Agro, Inc. has added Ray Funkhouser as the Turf & Ornamental sales representative for the Northeast region. Funkhouser joins Sandoz with a strong sales background as a former senior sales representative and regional advertising and sales promotion manager for more than 10 years at Stauffer Chemical Co. Most recently, he was a sales representative for Penn State Seed. Funkhouser can be contacted at 908-341-7386.

Ray Funkhouser

NOERGAARD TO LEAD CHR. HANSEN

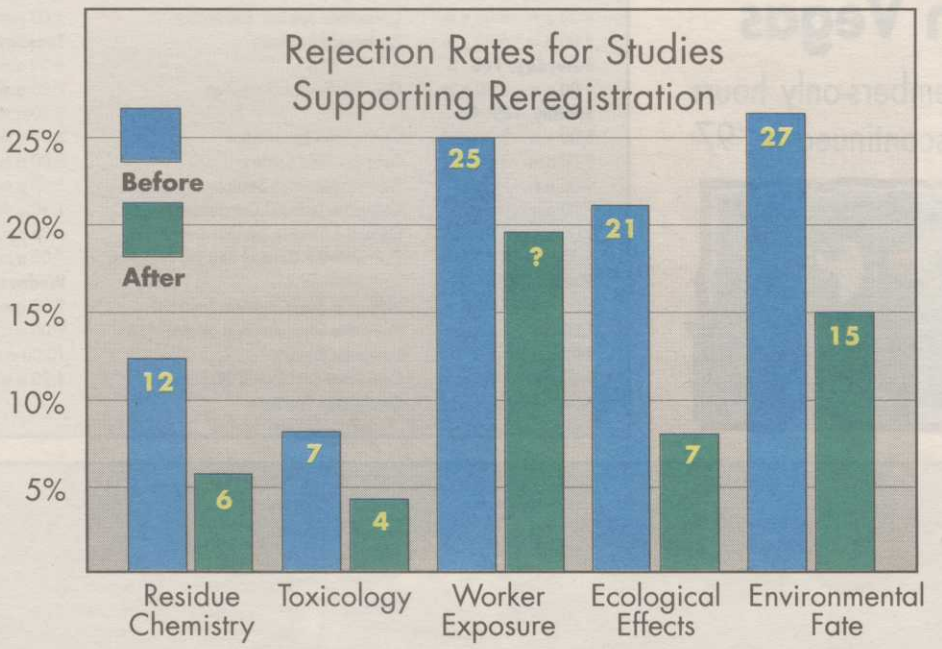
MILWAUKEE — Paul Hansen, president of Chr. Hansen A/S in Denmark, has appointed Leif Noergaard president and chief executive officer of Chr. Hansen, Inc. in the United States. Noergaard has been with Chr. Hansen for almost 10 years, most recently as executive vice president of the Worldwide Color Division.

GIESE: ZENECA'S MAN IN MIDWEST

WILMINGTON, Del. — Zeneca Professional Products has named Matt S. Giese as product service lead for the Midwestern and Western U.S. Operating from Lincoln, Neb., Giese is responsible for service support of Zeneca turf products. Giese joined Zeneca Professional Products in 1995 as a technical sales associate, working on an evaluation program for the development of a turf product.

Matt Giese

Cooperation at EPA results in better science



By HAL PHILLIPS

WASHINGTON, D.C. — As a bureaucratic entity not necessarily known for its efficiency or cooperative skills, the Reregistration Division at the federal Environmental Protection Agency (EPA) is setting an increasingly high standard.

The EPA has reported significant improvement in the quality of studies submitted to the agency in support of reregistering pesticide products. The average chemical requires 120 studies in support of its reregistration. Since 1993, the overall rejection rate for these studies has been cut in half, saving the agency thousands of review hours and the chemical industry significant testing costs.

"When data is rejected, it has to be redone by the company and my rework is phenomenal," said Peter Caulkins, deputy director of the Registration Division in EPA's Office of Pesticide Programs. "The cost to companies is in the billions just to repeat the studies.

"One company was informed they had a 40-percent reregistration rejection rate. I heard their reaction was, 'EPA is smoking something.' But to their credit, they created their own rejection-rate database and turned out to be 45 percent. Their rejection rate has since gone down to 8 percent.

"We're seeing actual, quantifiable results. We're tripling the number of reregistrations in a time when the agency has less money and less resources."

These marked improvements are the result of four years of workshops conducted in conjunction with the pesticide industry and its scientists. The result: Caulkins said EPA has improved its guidance for conducting these studies and companies are submitting better work.

Under 1988 amendments to the Fed-

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Bontempo to head up Novartis T&O

Ciba-Geigy Ltd. and Sandoz Ltd. have selected Emilio J. (Leo) Bontempo, president of Ciba's Agricultural Group in the United States, to head Novartis Crop Protection, which includes the turf and ornamental industry. Novartis is the name of the new company formed by the proposed merger of Ciba and Sandoz. Having gained approval from shareholders, the merger is now undergoing government regulatory review in Europe and the United States.

Dale A. Miller, president of Sandoz Agro, Inc., has been selected to head Novartis Animal Health in the United States. The third sector in Novartis' Agribusiness Division will be Novartis Seeds. It will be headed in the country by Edward T. Shonsey, now president of Northrup King, a Sandoz business.

Bontempo joined Ciba-Geigy in 1964 and held a number of administrative and marketing positions prior to becoming vice president-planning and administration in 1974. He served as vice president-marketing from 1978 until 1987, when he was named president of Ciba Crop Protection and the Ciba Agricultural Group.

Miller, in addition to serving as president and chief executive, is chairman of Sandoz Ltd.'s worldwide Agro Management Committee. He joined Sandoz Agro in 1986. Prior to joining Sandoz, he was associated with Velsicol Chemi-

Woerner acquires Warren's, foothold in overseas markets

CRYSTAL LAKE, Ill. — With its purchase of Warren's Turf Nursery, E.J. Woerner & Sons of West Palm Beach, Fla., has also acquired an international presence.

The purchase by the Woerner family comes only months after its September 1995 acquisition of the former Mace Sod Service, a 7,000-acre turf farm in Palm Beach County.

Woerner President Lester Woerner and Warren's Turf President Bill Curran announced the transaction.

The acquisition is aimed at further broadening Woerner's geographical base by adding operations in Georgia, Virginia, Indiana, California and Hawaii, as well as an entrance into the overseas market through its Southern Turf Division, Woerner said.

Curran said Warren's, based here in Crystal Lake, has been very patient in the search for the right buyer that could meet its objectives for the sale both from a business and an employee perspective. It is hoped Woerner will fit that role, he added.

Woerner added that one of the main attractions to acquiring Warren's was the great depth of quality management at all the various locations as well as its prominent name and reputation.

NEW PRODUCT OF THE MONTH

Golf course construction has been fast forwarded with the installation of concrete cart paths by machine. Power Curbers, Inc., a Salisbury, N.C.-based manufacturer, makes a mold for cart paths that fits beneath its Power Curber 5700-B paver. The wet mix is poured into a large hopper mounted on the machine and fed through the mold, producing the flat surface. For more information, contact Power Curbers, Inc. at 704-636-5871. For more golf car-related new products, see pages 43-46. Still more new products are featured on page 58.

EPA rejection

Continued from page 53

eral Insecticide, Fungicide and Rodenticide Act (FIFRA), pesticide manufacturers are required to submit scientific studies to bring the database supporting all pre-November 1984 registration up to current scientific standards for safety testing. The resulting flood of reregistration applications was supported by studies that were rejected by EPA nearly 50 percent of the time.

Something had to be done.

"You have a lot of environmental fate studies and toxicology studies for golf course chemicals," said Caulkins. "What were the reasons they were being rejected? After reviewing the studies, we identified the problem but not the solution. So we brought in the industry and said, 'This is what we found.'

"It was a classic TQM procedure. I charged the industry with putting together a group of scientists to ask, from a customer's perspective: 'How good is our guidance? What are you guys doing wrong? And what solutions do you propose?'

"The success of this process was our concentration on fixing the problem, not assigning blame. So I applaud the industry and its scientists... Much of the problem was simple communication: They didn't know what we wanted. On their end, there were QAQC (Quality Assurance, Quality Control) problems."

Any chemical seeking reregistration is the subject of some 120 studies. When studies are rejected — meaning they are sent back to the company, redone, then resubmitted to EPA — it's referred to as a "cycle". Before the recent changes, reregistration applications commonly featured 50 or more cycles. That number is now 10.8, or 20 percent of what it was.

Studies submitted in support of pesticide reregistrations can be divided into five groups, or disciplines: residue chemistry, environmental fate, toxicology, worker exposure, and ecological effects. A 200-page report was compiled for each, discussing why rejection rates were so high. The study of these reports and subsequent behavior modification has resulted in unprecedented improvements:

• Residue chemistry: The rejection rate in this discipline used to be 12 percent, now it's 6 percent. "That doesn't sound that high, but the number of these studies dwarf all the others," Caulkins explained. "For any given site, there may be 30 to 40 studies that have to be done. Also, metabolism studies are included here. When companies do metabolism studies, they base all their other data on those findings. If there are mistakes, if the [metabolism] study is rejected, all their other studies will be wrong. Errors here will mean other studies will be rejected."

• Environmental fate: This discipline includes ground water studies, surface runoff and spray drift. The rejection rate in this discipline had been 27 percent. Now it's down to 15.

• Toxicology: The rejection rate in this discipline is 4 percent, down from 7 percent. This drop isn't precipitous but, as Caulkins noted, these studies are by far the most expensive.

• Worker exposure: Caulkins explained that only two of the pesticide manufacturers had experts in this field. Consequently, the database is incomplete. The traditional rejection rate in this discipline has been 25 percent. An industry task force has been formed to study ways to bring this number down, said Caulkins.

• Ecological effects: The rejection rate had been 21 percent. It has dropped to 7 percent.

"On the company side," said Caulkins, "is where I really got blown away. I had no idea how important relative rankings were. In other words, if I told Company A that it had a 30 percent rejection rate and a competitor had a 20-percent rate, that information went straight to the top."

This high-level executive involvement might explain the mind-boggling improvement in company performance.

In its study of rejection rates, EPA has tracked the performance of 16 major chemical manufacturers, all of which supply products to the golf course industry. Prior to 1991, the lowest rejection rate among the 16 was 14 percent, while the highest was 57 percent. Today, the lowest rejection rate among the 16 is 0 percent, while the highest is 17 percent.

The bottom line: Companies are providing better studies and saving money. EPA, strapped by budget and staffing cuts, has reduced its work load.

"And consider the effect on registration," said Caulkins. "For a company to put a patent on an active ingredient takes six to eight years. That's before it even gets to us. In the early '80s, depending on how many cycles it went through here at EPA, it was upwards of five or six years to get the chemical through. That's 11 years of their 17-year patent chewed up by the process. That makes it hard to make money.

"Now we're down to 38 months. We've cut it in half, and I think we can halve it again."