Companies search for alternatives to synthesized chemical pesticides

RALEIGH, N.C. — America is currently in a state of "chemophobia," says R.L. Brandenburg, extension entomologist at North Carolina State University. Companies are responding by searching for alternatives to synthesized chemical pesticides, he further notes.

"Over the next five years or so it will become more and more important to find alternative approaches," he says. "The public is demanding it, even though they’re demanding nicer lawns, nicer shrubs and nicer landscapes at the same time."

The public often receives information that is presented to it in a very emotional fashion, argues Brandenburg. "Sometimes emotion will overrule factual information and, as a result, we need to be looking at some of these other areas and make them available to the public."

The most obvious alternative, yet often overlooked, is to maintain vigorous, healthy turf, says Brandenburg. "Many insects like thin turf because it’s easier for them to dig into the soil, lay their eggs and move through and feed on the grass."

Reducing thatch is also important, he adds, because "insects and thatch go together. The thatch provides a protective barrier for them by binding pesticides, preventing them from reaching the insect."

Biologicals currently being used successfully include milky spore and parasitic nematodes for controlling white beetle grubs. "Improved techniques to produce milky spore have been developed and should improve its effectiveness over a wider range of temperatures and species," he says.

Parasitic nematodes have been around for years, but they remain an expensive alternative. "The one that I’m aware of that is available for turf would cost about $800 an acre. But in a few years, as the technology is improved, these may be produced much more cheaply."

Other biologicals to keep an eye on, according to Brandenburg, include various forms of diatomaceous earth and crustacean shell products, many of which remain untested under controlled situations, but are currently in the marketplace. These products destroy insect eggs.

FERTILIZATION

It’s almost time!

FORT COLLINS, Colo. — Fertilization between August and December will improve heat and drought tolerance of turfgrass and result in less mowing, according to researchers at Colorado State University.

Studies by Drs. Tony Koski, cooperative extension horticulturist, and Ohio State turf specialist John Street showed late season applications of nitrogen enhance fall and winter color of perennial ryegrass and tall fescue. The studies also determined that

BIG NUMBERS...Roundup herbicide should enter the elite ranks of $1 billion products, according to an analysis by Prudential-Bache Securities. The firm predicts worldwide sales of Monsanto’s popular broad spectrum herbicide to exceed that mark sometime in 1989.

THE DEADLINE...for entering the 20th Annual Associated Landscape Contractors of America’s Environmental Improvement Awards Program is Sept. 1. Entry forms can be obtained by calling ALCA at (703) 241-4004.

'PLACEBOUND STUDENTS'...The Institute of Food and Agricultural Sciences (IFAS) has a new program for non-traditional students who cannot leave work or family to attend school. The innovative program is for students who pursue a degree in ornamental horticulture and the most recent graduate is Hilberto Gilbey, manager of Ram Plant Growers in Fort Lauderdale. "The program helps industry employees who also want to continue their education and training," says Dr. Stephen Verkade, program coordinator. A full, four-year offering of courses is expected by next year.

OLD FRIENDS NEVER DIE...An old friend, J. Mark Nuzum, has joined Western Branch Holding Company Nitrex as vice president of specialty products. Nuzum, who has been in the green industry since his days at Turf Wiz and Tidewater Agricorp, is formerly a manager with the Turf Division of Lebanon Chemical Co.

COOLING SPRINGS...According to a recent article in Golf Digest, golf course construction in Palm Springs, Calif., may be one of the reasons the area’s temperatures have dropped since the early 1970s. Dr. Robert Balling of Arizona State University says that solar energy is absorbed by concrete and asphalt in urban areas while golf courses and other parklands have an opposite, cooling effect. Palm Springs temperatures have dropped about two or three degrees in the last 15 years.

POURING IT ON...Despite new efforts by the green industry to decrease pesticide use through IPM programs and bio-controls, overall U.S. pesticide demand will grow four percent yearly through 1992. According to an independent report by John Clifford of The Freedonia Group, Cleveland, Ohio, pesticide sales will reach $5.4 billion by 1992. "Biological control measures cannot match pesticides’ effectiveness and thus will not displace their dominant role,” a press release notes.

continued on page 14
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New technology in fertilizers has one application per year

MILPITAS, Calif. — Sierra Chemical Co. has released to the turf industry a revolutionary new fertilizer.

Called Customblen, these resin-coated controlled-release fertilizers are based upon Sierra's Osmocote technology. They release nutrients to the turf plant for up to one year with one application.

The product has been used in the nursery industry for the last 20 years, but is new to turf.

"Sierra has recently developed a line of products for both turf and ornamental use in landscape, lawn care and golf course applications," claims marketing manager Mark Broxon. "University turfgrass researchers are testing controlled release fertilizer (CRF) products this year.

XERISCAPE

New garden illustrates conservation and beauty

MESA, Ariz. — To demonstrate the water conservation properties and beauty of xeriscaping, a one-acre xeriscape garden was recently opened for public viewing here.

The result of a joint venture between Mesa Community College, Salt River Project and the city of Mesa, the garden provides examples of new design possibilities, and ways to replace or modify existing landscapes to make them more water efficient.

"This was definitely a community project," says Paul Freestone, water conservation specialist for the city of Mesa. "We started the garden with $25,000 in cash and ended up with a landscape project worth approximately $150,000." Thirty-nine landscape and irrigation companies donated time and material to the garden, and local citizens donated their time to complete the project. Extra help was provided by the University of Arizona Extension Service and Arizona State University's Graphic Arts Department.

The garden features 150 varieties of shrubs and ground covers, 60 varieties of trees and three types of turfgrasses. All are zoned in accordance with their water needs and sun exposure. Signs posted throughout the garden identify the various plants and explain the principles of xeriscaping.
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ORNAMENTALS

'Common sense' helps control insect problems

RALEIGH, N.C. — The best method of insect control on ornamentals is often common sense, says J.R. Baker, Ph.D., an extension entomologist at North Carolina State University.

"If you're fortunate enough to choose which plants are to go into a landscape, select varieties that don't have a lot of insect and mite problems," suggests Baker. A visit to a nearby, healthy landscape will reveal which varieties are thriving and which aren't.

Another seemingly obvious step is to select plants that are healthy to start with. For example, look for cankers on the stem of dogwoods, which attract dogwood borers. If box elders are being considered, use males. Females produce seeds, which attract box elder bugs.

"Also, if you're setting out shade trees, make sure you have a way to irrigate them for the first couple years," says Baker. "Once a tree starts to wilt just a little bit, it will be susceptible to flat-headed wood borers, round-headed wood borers, ambrosia beetle, bark beetle—any type of insect that is attracted to trees under stress."

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LANDSCAPING

Trees plant temporary roots

PHOENIX, Ariz. — Hundreds of date palm trees have been planted in the middle of downtown Phoenix prior to their eventual relocation to an area landscaping project.

Valley Crest Landscape, a subsidiary of Environmental Industries, Inc., is responsible for the urban forest. The company is completing Arizona Center, a $515 million office/retail project on 18.5 acres.

Rouse-Phoenix Development Corp. is building the center.

More than 900 trees were planted at the urban resting place. The mature specimen trees are at least 15 years old, and range in height from 20 to 42 feet.

Valley Crest purchased an entire date grove in Indio, Calif., and shipped them 250 miles to Phoenix.

The relocation is expected to last into 1990.

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