

## Soil technology fills porosity gaps

Isolite is described as a breakthrough in soil modification technology which offers a permanent solution to soil management headaches, says its manufacturer, New Golf Concepts, Inc. of Westminster, Colo.

Isolite is a porous ceramic granule of uniform size with about 70 percent pore space throughout each granule. With no "dead-end" pore space, stored moisture is directly available to the plant, the company says. Isolite also does not break down in soil.

According to New Golf Concepts, lack of porosity is a main culprit in problem soils used as a growing medium. An "ideal" soil, says the firm, contains equal mix-

tures of solids and pore space.

In clay soils, solid particles create a large surface area to which a



thin layer of water adheres tightly. Plants often cannot extract water from the soil solution because attraction is so great and the water is unavailable. Result: poor plant growth. Also, clay-rich soil is more

susceptible to compaction in high traffic which decreases macroporosity.

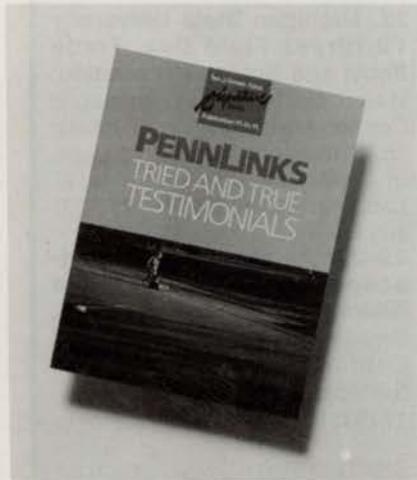
By contrast, sandy soils abound in macro pores, which leads to drought-like conditions. New Golf Concepts says a golf green can be an excellent example of a soil which is too sandy to retain enough water to sustain healthy plant growth without constant irrigation and management.

Adding the product to the root-zone can achieve the needed balance between micro- and macroporosity. Also, Isolite adds bacteriological temperature and water buffering especially important in sandy soils.

**Circle No. 191 on Reader Inquiry Card**

## Read what supers say about this bentgrass

After 12 years of research and testing at Penn State University, PennLinks creeping bentgrass was marketed as a



deep-rooting species which provides a grainless putting surface.

"PennLinks Tried and True Testimonials" is a compendium of testimonials from superintendents in the U.S. and England on the

quality of PennLinks creeping bentgrass.

Tee-2-Green Corp., of Hubbard, Ore., says PennLinks sets new standards for upright growth, putting surface quality, wear tolerance and turf establishment.

Tee-2-Green also markets PennCross, PennEagle and PennWay Blend creeping bentgrass.

**Circle No. 192 on Reader Inquiry Card**

## Creeping red fescue now on the market

Fine Lawn Research now offers Flyer, a new variety of creeping red fescue.

The company says Flyer produces a fine, dense, deep green turf which received overall quality ratings in the 1984 National Fine Leaf Fescue tests.

The firm says the variety is particularly suited to blend well with Kentucky bluegrass and enhances turf-type tall fescues and perennial ryes.

**Circle No. 193 on Reader Inquiry Card**

## Turf-type tall fescue low growing, low maintenance

Rebel, Jr. from Lofts Seed, Inc. is darker than other turf-type tall fescues, says Dr. Richard Hurley, VP



and Research Director for the firm.

Rebel Jr. has a darker green color, offers moderately low growth with excellent performance in full sun or moderate shade and needs low to medium maintenances, says the company.

The variety adapts to a wide range of environments and is resistant to insect and disease damage.

Circle No. 194 on Reader Inquiry Card

## Kentucky bluegrass ranks among the best

From Jacklin Seed Co. comes Suffolk Kentucky bluegrass, a variety which consistently ranked in the upper third in quality ratings of 72 like varieties, reports Jacklin.

Suffolk is a new, moderately low-growing, medium dark-green variety which has high test results in resistance to fusarium blight, powdery mildew, leafspot and dollar spot.

Circle No. 195 on Reader Inquiry Card

## Three seed varieties enter the market

Three top-rated seed varieties from O.M. Scott & Sons Co. will hit the market as part of the Scotts ProTurf product line.

The varieties are: Sonesta seeded bermudagrass, Aztec tall fescue and Brigade (formerly Melody) hard fescue.

Sonesta will have limited availability this fall. The company says based on National Turfgrass Evaluation Program results, the variety will be the highest quality seeded bermuda on the market.

Aztec, an improved tall fescue, will be marketed next year. Dark green and fine textured, the variety received high ratings in national trials in 1988 and 1989.

Brigade will also be on the market in 1992. Ranking fifth out of 93 entries, the hard fescue placed well in national fine fescue tests.

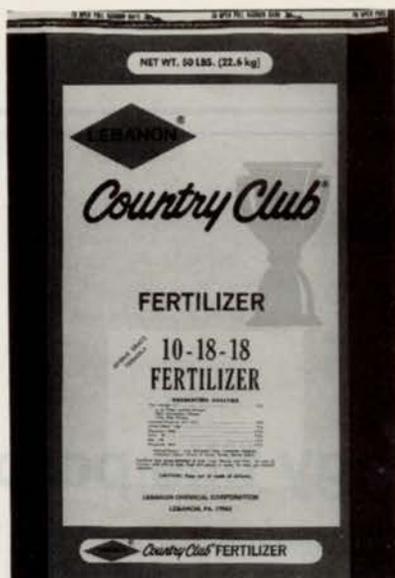
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## Starter fertilizer lends a hand on greens, tees

Lebanon Turf Products recently introduced Country Club 10-18-18 AOS starter fertilizer which the company claims assures successful seeding and even nutrient distribution.

Country Club 10-18-18 AOS (aerification, overseeding, starter) contains the 1-2-2 ratio including 35 percent organic nitrogen, 2.2 units water insoluble nitrogen for safe and sustained feeding and 100 percent sulfate of potash.

Lebanon Turf Products says the fertilizer may be used effectively in aerification and topseeding, providing sufficient amounts of phosphorus and potassium while keeping available nitrogen at a manageable level. Spoon feeding cool season turf in



overseeding situations is possible.

Circle No. 197 on Reader Inquiry Card

## Three turfgrasses now available commercially

Able-1, Honor Roll and Front Runner are available in ample supply from manufacturer Davenport Seed Corp. in Davenport, Wash.

Able-1 is a deep blue-green turf with dense, uniform growth. The company says the variety shows excellent disease resistance, early spring green-up, and high tolerance to heat, cold, drought, shade and wear.

Front Runner, a tall fescue, blends the qualities of Avanti, Guardian and Chieftain varieties, according to the company. Bright green in color, the product has high grassplant density, excellent low vertical growth, fine leaf texture and superior disease resistance.

Honor Roll premium bluegrass sod blend features the primary cultivar A-34 BenSun, the premium bluegrass which has been popular with growers for 20 years.

Circle No. 198 on Reader Inquiry Card

## Self-healing tire more than normal sealant

Synair Corp. now markets the TyrLyner, a self-healing rubber liner for tires that the company says prevents puncture flats.

The TyrLyner bonds a layer of rubber to the tire casing, converting any pneumatic tire into one protected against air leaks. Synair says the process gives uniform coverage over the most vulnerable areas. It is called 99 percent effective in preventing puncture flats.

Circle No. 199 on Reader Inquiry Card

## Tall fescue blend fills need in Southeast

Confederate brand tall fescue blend addresses the needs of the Southeast turfgrass market, according to Turf-Seed, Inc.

The blend contains Olympic II, Apache and Monarch plus the newly-released Safari. Since Confederate is a branded blend, the company says it will be upgraded with newer, improved varieties as they become available. The Safari component has improved brown patch resistance that is important to the Southeast region.

Confederate has a dark green color, and a moderate growth habit, which Turf-Seed says makes it adaptable and quick to establish.

Circle No. 200 on Reader Inquiry Card

## Bermudagrass seed in many quantities

Numex Sahara bermudagrass is now available in one-, three-, five- and 50-pound bags and a 25-pound pail, manufacturer Farmers Marketing Corp. announces.

Numex Sahara is a seeded, turf-type bermudagrass with fine leaf texture, dark green color and uniform appearance, the company says. The variety shows superior drought avoidance characteristics and is recommended for lawns, sports fields, fairways, tees and roughs.

Circle No. 201 on Reader Inquiry Card

### Events from page 20

N. Washington Ave., Suite 2, Lansing, MI 48906.

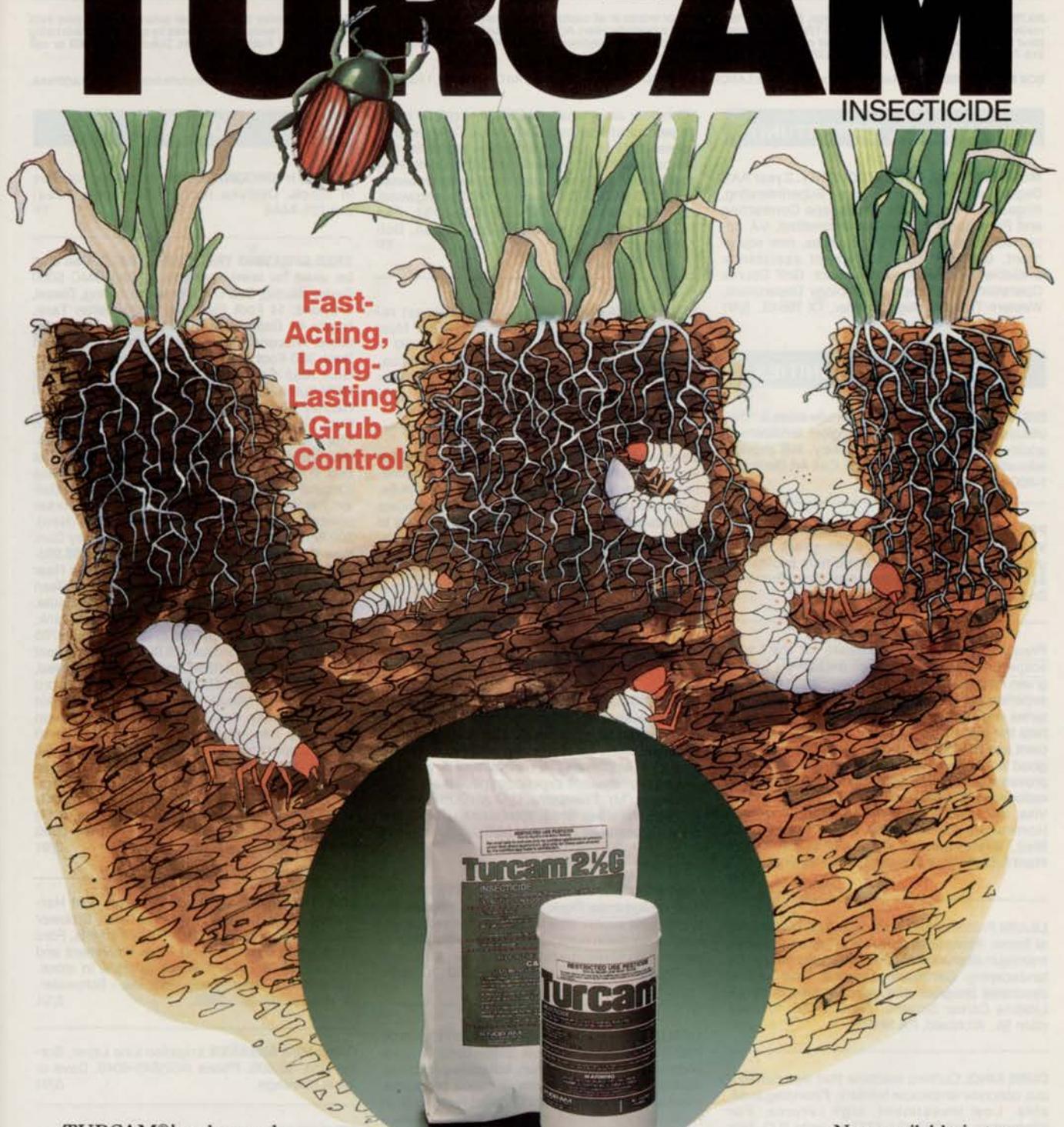
**22: Michigan State University Turfgrass Field Day, Trade Show and Equipment Auction,** Hancock Turfgrass Research Center, MSU campus. Contact: Dr. Bruce Branham, MSU Dept. of Crop and Soil Sciences, E. Lansing, MI 48824; (517) 353-2033.

**22-23: Pennsylvania Landscape and Nursery Trade Show and Conference,** ExpoMart, Monroeville, Pa. Contact: PNA, 1924 North Second St., Harrisburg, PA, 17102; (717) 238-1673.

**SEPTEMBER**  
**15-17: The Fertilizer Institute's World Fertilizer Conference,** NY, N.Y. Contact: The Institute, 501 Second St. NE, Washington, DC 20002. **LM**

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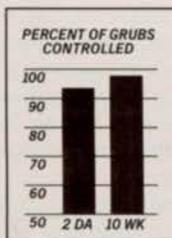
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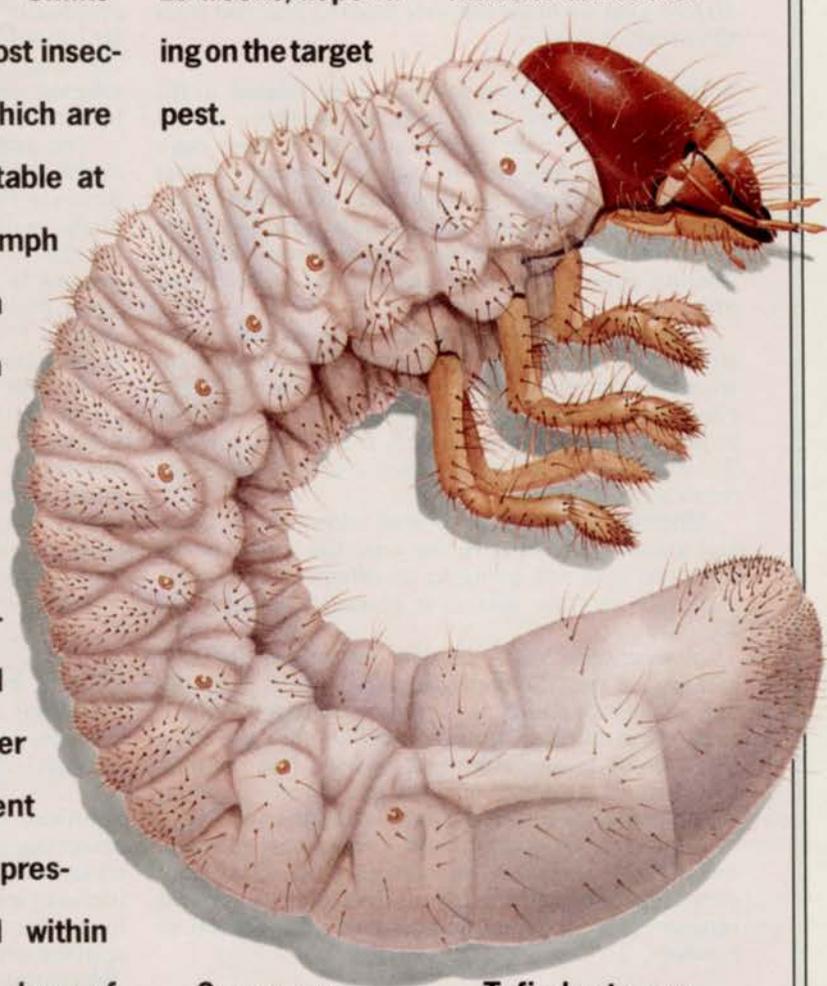
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# PROBLEM MANAGEMENT

## Can wells be too close to trees?

**Problem:** We have several maple trees showing sparse crown with smaller leaves. There is quite a bit of dead wood. Last year there was some construction, and builders put soils around one side of these trees, about two to three feet high. We believe the problem is related to the stress from the fill. We are interested in removing the excess soil and putting in a well. How far back from the trunk do we need to build the well? The crown diameter is about 20 feet. Can we build the well three to four feet from the trunk? (Ohio)

**Solution:** The problem appears to be related to fill damage. Generally, most trees are sensitive to any new soil placed over the root area. Some trees can't tolerate even a half-inch of new soil around the root system. The fill causes compaction and affects aeration and water tables. As a result, affected trees begin to show various degrees of symptoms and decline over a period of one to four years. They often die.

The construction of a tree well to minimize the stress from fill is often recommended. The problem we see is that often these wells are constructed very close (one to two feet) from the tree trunk. Ideally, to protect the roots, particularly the absorbing roots, the well should be constructed alongside the foot outside the dripline.

Otherwise, if the fill is placed within the dripline and a small well constructed near the trunk, in my opinion, it is not going to be effective unless an elaborate aeration system is installed beneath the fill soil.

In your case, since the soil was put on the root area a year ago, the damaging effect of fill probably has already started. Try to remove as much fill soil as possible and then aerify. Make sure this operation is not going to hurt any roots growing into the new soil. If large numbers of roots are already growing into the new soil, leave them as is and then aerify.

Deep root fertilization with slow-release nitrogen and proper watering should help stimulate the growth and development of absorbing roots and improve plant health. Consider pest management as needed.

## Anthracnose on sycamores

**Problem:** We have been having severe problems with anthracnose disease on sycamore. Is it true that we can inject Arbotect 20S fungicide to manage sycamore anthracnose? (Pennsylvania)

**Solution:** The American sycamore is planted extensively in many urban areas throughout the U.S. Anthracnose is a common fungal disease caused by *Gnomonia platani* on sycamore trees during early spring. Because of the monoculture of sycamore in many areas, the disease can spread rapidly from tree to tree and become very unsightly.

Four distinct stages of sycamore anthracnose have been identified; however, all stages may not develop in a single year:

**Twig blight:** small, one-year-old twigs are killed before the leaves emerge in the spring. Affected twigs may have canker around buds.

**Bud blight:** symptoms appear when buds expand in the spring. Buds are generally killed by cankers.

**Shoot blight:** is more visible than bud blight. In this case, shoots and young leaves die suddenly. The symptoms often mimic frost injury and are difficult to diagnose.

**Leaf blight:** small lesions appear on leaves which eventually become large and produce necrotic angular lesions along the veins. Brown fruiting bodies of the fungus develop in diseased leaf tissue. The affected areas become discolored and the entire leaf becomes defoliated.

The anthracnose disease is favored by cool and moist conditions during spring and fall. Reports indicate that disease severity, particularly shoot blight, is determined by the mean temperatures during the two-week period following budbreak. The disease is usually more severe when the average mean daily temperature for the period is 50 to 55 degrees F. As the temperature increases above that range, disease severity decreases.

Arbotect 20S can be trunk-injected to manage sycamore anthracnose. Reports indicate that one injection of Arbotect 20S in the fall before leaf abscission can help manage the disease for three growing seasons. An alternative approach is to manage the anthracnose disease by treating the foliage with recommended fungicides such as Benomyl or Cleary's 3336.

Follow label specifications for better results.

## Does Polycote protect buds?

**Problem:** A product representative claims that Polycote will protect buds and twigs. What is your opinion? (Illinois)

**Solution:** We at Davey Tree are researching water-absorbing polymers of liquid gels which are marketed as having the ability to improve soil aeration and increase water holding capacity. I'm not sure if you mean protection of buds and twigs from direct application or from their alleged ability to prevent desiccation by improving soil water retention. It is always a good practice to request research data to support any claims made about a product.

It would be premature to comment on our research, which is in the preliminary stage of a three-year study.



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Questions should be mailed to Problem Management, LANDSCAPE MANAGEMENT, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.