

## U.S. Microbics readies new bug plant

CARLSBAD, Calif. — U.S. Microbics, Inc has announced that its new manufacturing facility is proceeding on schedule as contractors install fixtures, laboratories and production equipment in preparation for startup of microbial fermentation and blending operations sometime this month.

The company expects to initially produce limited quantities

of microbes in its pilot plant operation with both 14-liter and 130liter fermentors.

These vessels will be used to ferment microbial cultures which will be blended into agricultural products used for plant growth enhancement and water savings for applications on golf courses.

The company also anticipates

the installation of a 1,000-liter fermentor within the next six months to increase its microbial capacity to meet Bio-Raptor demand. The larger fermentor will enable the company to scale up pilot plant operations and internally ferment microbial blends rather than rely on third party fermentation.

The 22,000 square feet of office and warehouse space should be ready for full occupancy by August 15 and management eagerly waits for the contractor's dust to fall. Company Executive Vice President, Mery Robinson, stated, "This new facility will culminate our efforts to restart the manufacturing operations after a six-year hiatus. With numerous past customers requesting microbial products we will finally be in a position to start satisfying their needs during this fiscal year."

## TPI survey says sod sales hot

ROLLING MEADOWS, Ill.—Golf courses are wielding a bigger stick in the sod business than ever before, according to a recent survey by Turfgrass Producers International.

The survey—which polled TPI members on the distribution of their 1997 sales—showed that the percentage of the nation's turfgrass sod purchased by golf courses has nearly doubled in the last decade.

In 1988, a mere 4.7 percent of all sod purchases related to

Better installation
procedures and heartier
cultivars are also
leading to increased use
of turfgrass sod on golf
courses.'

—Doug Fender

golf course development and renovation.

But by 1997, that percentage had grown to 8.14 percent.

"Turfgrass sod enables a new or renovated course to open earlier and generate cash sooner," explains Doug Fender, executive director of TPI, noting that "better installation procedures and heartier cultivars are also leading to increased use of turfgrass sod on golf courses."

Government statistics place nationwide sod sales at nearly \$500 million annually.

Members of Turfgrass Producers International include nearly 1,000 turfgrass sod producers in 36 countries.

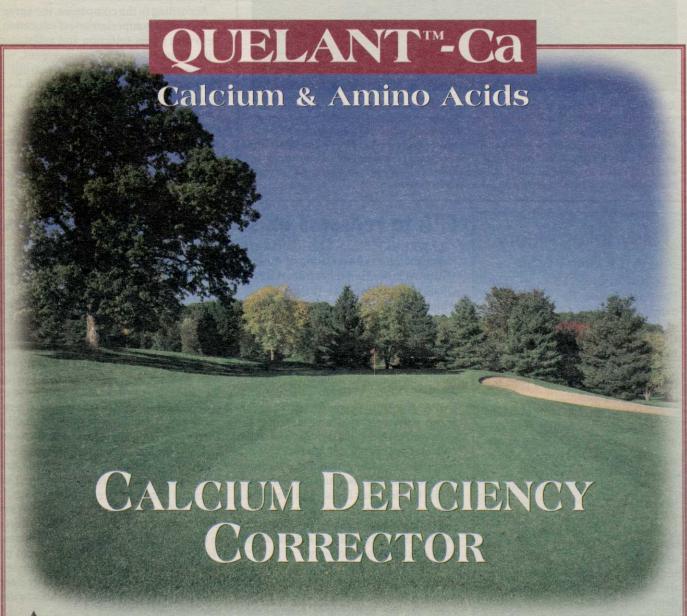
## **EPA/pesticides**

Continued from page 39

facturers could meet requirements of the law if: decisions are based on scientific data and actual pesticide use; allow for development of scientific methodology to meet the new safety standards and revised objectives for protecting human health and the environment; and establishes and communicates open, uniform and scientifically practical policies to guide consistent implementation.

Among the 'default assumptions' the EPA can make in applying the law is the contention applicators (golf course maintenance staffs) will use the product with maximum frequency and in the maximum dosage allowed by law.

GCSAA has embarked on an extensive membership education and communication plan to address the issue, and has joined forces with numerous groups to work with lawmakers on the implementation of the law.



Addition of calcium to the soil by traditional means is not usually efficient or effective in treating the calcium deficiency of turfgrass. Once applied, the common forms of liming materials can rapidly change to compounds that are insoluble in water and not readily available to the plant. Continuous applications over long time periods are necessary to effect even modest improvements in calcium uptake.

Quelant "Ca is a newly available amino acid chelated calcium product that corrects calcium deficiencies in turfgrass upon application. Quelant "Ca provides readily available calcium chelated with amino acids so that it is easily absorbed by the leaves and/or the roots of the plant regardless of most soil and water conditions. The unique formulation of amino acids used for chelation was



developed not only to facilitate absorption by the leaves and roots, but to increase mobility of the calcium within the plant as well.

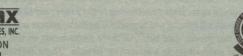
Quelant "-Ca is normally applied as a foliar spray and may also be applied through fertigation. Either way, it is tank-mix compatible with herbicides, soluble fertilizers, insecticides, fungicides and plant growth regulators. It will even help improve the efficiency of most of these treatments by increasing their absorption and translocation within the plant.

Best of all, Quelant\*\*-Ca is economical to use and it protects the environment.

Quelant"-Ca — a true systemic. It's new...it's unique... and nothing else works quite like it!

For more information about Quelant™-Ca call Nutramax Laboratories' at: 800-925-5187







GOLF COURSE NEWS