THRU THE GREEN

USGA

Continued from page 5

- would produce only a 13% increase in the CEC. Given the high price of the humate used in Dr. Kussow's examples, he did not believe the cost justified the benefits.
- 3. Another benefit of humates or humic acids are their ability to solubilize micronutrients already in the soil. Dr. Kussow points out that turfgrass roots also excrete organic compounds that solubilize micronutrients and he believes that the chelating action of humic acid has to be considered of little benefit to turfgrass.
- 4. During Dr. Kussow's review of scientific literature, he noted several studies that indicated humic acids can absorb fungicides and herbicides. These studies indicated that surface applications of humic acids or humate can significantly reduce

the effectiveness of systemic pesticides by reducing their absorption by plant roots and soil-borne pathogens and insects. Another study noted that humic acid and humate products showed no significant improvement of root length or root number in creeping bentgrass.

5. Dr. Kussow concludes his article by saying that there are situations where significant positive responses can occur in turfgrass, however, positive effects should not be expected over a wide range of conditions.

Obviously, there is a need for more research in this area before the true merits of these products can be determined relative to their cost. It is not my intention to discourage the use of any particular products. The turfgrass industry continues to produce products at a rapid pace which may show significant benefit to turfgrass growth. The best advice is to test these products on a limited basis and be cautions, particularly when it comes to products for use on putting greens.

environment."

The next phase of the overall effort could include helping association members stop smoking, expanding GCSAA's current education and training programs, and completing a statistical mortality ratio study to put UI's preliminary data into context.

"We also think this gives us an opportunity to forge a new partnership with groups that can help us accomplish our mission," Mona said. "For example, the chemical manufacturer's have made great strides in packaging and formulation over the past decade. This is one more reason to work closely with them in an effort to develop new technology in products and packaging,. Another example could be working with an organization like the American Cancer Society on the smoking issue. This also gives GCSAA the opportunity to continue to strongly encourage and support the **Environmental Protection** Agency."

GCSAA HEALTH PLAN

Continued from page 5 study was to begin the first phase of an overall look at occupational health and safety issues that affect our members," Mona continued. "This is a long-term commitment to ensuring that superintendents work in a safe and healthy

SUPPORTER LISTING

SCOTTS PROTURF

Fertilizers - Poly S and new Triaform technologies Herbicides, Fungicides, Seed, Soil, tissue, water and turf disease testing Chuck Dal Pozzo, Sr. Tech. Rep

510/791-8985

RUSSELL D. MITCHELL & ASSOC., INC.

Providing quality irrigation design and consultation services including bid document development, hydraulic analysis, and field staking. 510/939-3985 510/932-5671 FAX

CALCIUM

Pacific Pearl Oyster Shell -- the most efficient calcium for turfcare pros. Available from your fertilizer dealer. For technical assistance call John Mazura Jerico Products, Inc. 707/762-7251

MEDALIST AMERICA SEED

Complete line of turfgrass seed - Blue, Bent, Rye, Fescue, Bermuda. Highlights: Triple-A, Fults, Medalist Gold, Sundevil, Premium Sod, Putter, Amigo Blends are our specialty!

Mike Tentis

800/742-0463