USGA Will Spend \$5.4 Million On Research Over Next Three Years

The United States Golf Association will spend \$5.4 million on research over the the next three years, more than double its previous rate, and has directed \$3 million of the total toward evaluating the impact of golf courses on the environment.

In announcing the association's decision to study how fertilizers and pesticides affect the environment, C. Grant Spaeth, the USGA's president, said, "Right now the game is threatened by the lack of knowledge about the environmental impact of pesticides and fertilizers used to maintain golf courses. I can think of nothing more urgent to golf than to answer this environmental question, and to propose responsible solutions."

The work will be done by land grant universities throughout the United States, assuring that studies are relevant to a variety of conditions, such as soils and climate. Additionally, the USGA committee that oversaw turfgrass research has been renamed the Turfgrass and Environmental Research Committee, and has been expanded to include recognized authorities from environmental agencies and organizations.

Spaeth said the USGA will enter into the program with no preconceived position. "We must maintain a position as the honest and independent broker."

These studies will examine questions such as whether fertilizers and pesticides contaminate ground water, and if they do, the duration of their impact.

Studies will also be geared toward the development of alternative and non-chemical methods of pest control, and the influence of golf courses on people and wildlife.

The project will be the responsibility of the Green Section Committee, chaired by Ray Anderson, of Chicago. Jim Snow is National Director of the Green Section and Chairman of the Research Committee, and Dr. Mike Kenna is Director of Green Section Research. Dean Knuth is Director of Green Section Administration. The Golf Course Superintendents' Association of America plans to cooperate with the USGA on this enterprise.

MEMBERSHIP REPORT

NEW MEMBERS-SEPTEMBER 19, 1990

| Dan Gabler | Class | F | Strate Grain Company |
|-------------------|-----------|----------|----------------------|
| Harvey Nornes | | F | SHR Golf |
| Bruce Speiers | | F | RW Golf Cars |
| RECLAS | SIFICATIO | N | |
| Mike Davies | | BII to A | Lutsen |
| Mitchell Fossey | | BII to B | Eisenhower |
| Dennis Morgenweck | ĸ | B to A | Mora |
| David Deem | | BII to B | Hazeltine |
| Bradley Harne | | C to F | Nyberg Ace Hardware |
| Andy Lindquist | | A to E | Anoka Technical |
| Fred Taylor | | BII to B | Mankato |
| Scott Pruszinske | | BII to B | Hyland Greens |
| Scott Sievert | | B to A | Vallebrook |
| Michael Hoffman | | BII to B | Dwan |
| George Weir | | BII to B | Winthrop |
| Greg Spencer | | BII to A | Brookview |
| Warren Nehring | | BII to A | Koronis Hills |

Pest Update

By MARK E. ASCERNO Department of Entomology

1. The drought of 1988 resulted in high populations of the two lined chestnut borer, *Agrilus bilineatus*. Oaks, especially those located on sandy soil, are being lost.

2. Elm leaf beetle (ELB), *Xanthogaleruca luteola*, populations which were high in 1988, have remained high in 1989. Previously, ELB had been a spotty problem associated primarily with Siberian elm. In 1989, ELB was widespread in Minneapolis and St. Paul on American, Siberian, and hybrid elms. Indoor invasions for overwintering of the beetles are resulting in a record number of complaints. It remains to be seen whether ELB will return to its previously spotty distribution or if it will take a place as a consistent urban pest.

3. Boxelder bugs, *Boisea trivitata*, have returned to normal after a year of tremendously high populations.

4. Dutch elm disease doubled in 1989, compared to 1988.

5. Unknowns: Introduced pine sawfly, *Neodiprion sertifer* (Feoffroy) on mugo pine in St. Paul, Minnesota; a wooly aphid on green ash; a bud and twig boring Pyralid in birch.

Prevention of Resistance To DMI Fungicides In Turf Pathogens

The North American Fungicide Resistance Action Committee DMI Working Group is a cooperative effort among producers of these highly active, demethylation-inhibiting [DMI] fungicides to prevent the development of resistant pathogens.

Selection for resistant individuals can, over time, lead to loss of field efficacy.

The following recommendations should help to reduce selection pressure on the fungal population and, therefore, to preserve the excellent activity of these fungicides against diseases of turfgrasses.

• Lower risk of resistance development can be achieved when these materials are applied preventively or early in the disease epidemic.

• **Use proper equipment** to apply the recommended gallonage to ensure thorough coverage.

• **Do not use DMI's alone season-long.** Use a tank mix or alternate sprays with a non-DMI fungicide. Alternation with other DMI fungicides will **not** help prevent resistance development.

• **Consult your local Extension Service** if you are unsure about appropriate alternation or mixing partners.

Your adherence to this anti-resistance strategy benefits all users of these fungicides.

DMI Fungicides Currently Labelled For Use On Turfgrasses

| TRADE NAME | PRODUCER |
|------------|------------|
| Banner | Ciba-Geigy |
| Bayleton | Mobay |
| Rubigan | Elanco |

Greg Hubbard, Membership Chairman