and when no rain is forecast. The irrigation will be turned off that night. Water tends to reduce Award's efficacy.

In addition to the broadcast method of Award, the course setup person, the IPM Specialist and myself will treat specific areas that are likely to cause problems for golfers and crew (i.e., green slopes, tees, etc.) with Orthene or Award. Also, out-of-play mounds that need specific attention are treated with Award sprinkled around the mound.

**Worm Control Program**

Sodweb worms, army and cutworms are treated preventively and curatively as needed. Areas such as trap faces and shadow boxes on fairways that have higher cuts of grass make it easier for larvae to go undetected until after damage has occurred.

For this reason, during the summer months we will treat with Vector TL as a preventive control. When conditions are right for worm activity on greens and tees (i.e., cloudy days with rainfall) we will apply preventive treatments of M.V.P., which is a microencapsulated form of *Bacillus thuringiensis*.

This product has given us a 4-7 day control for sodweb worms as opposed to regular Dipel, which is 1-2 days at best. Greens are closely monitored during spring, summer and fall months. If treatment is needed, it is usually Dipel and a light rate of Orthene or Astro. Astro, a pyrethroid, has provided us excellent quick knockdown of worms.

**Oxygen Generation**

Plants, including turfgrass release significant amounts of oxygen into the air. A turf area 50 feet x 50 feet produces enough oxygen to meet the needs of a family of four [Huffine and Grau 1969]. An acre of turf would support 174 people, and a 100 acre golf course would provide enough oxygen for 17,400 people.

**Summary**

A good IPM program, as the foundation to the insect control program, will ensure that you will remain in control of your turf insect problems and also control disease and weeds.

Nothing will substitute for developing and maintaining good cultural practices, keeping in mind that sound cultural practices and a good insect control program can mean dollar savings to you in the overall maintenance of your golf course for both time and material.