

TURF TWISTERS

Question: Are we poisoning the soil under turf by the continual use of chemical fertilizers, weed killers, and fungicides? Aren't these materials hazardous to humans?

Answer: We think not. Most of the elements found in fertilizers and pesticides are present also in the soil. It is the *combinations* of the elements in pesticides which make them behave as toxicants. The soil has a remarkable ability to absorb these materials and to convert them to non-toxic forms. As far as fertilizers are concerned, it apparently makes little difference to the plant whether the nutrients are supplied in inorganic (chemical) form or in organic (natural) form. It is believed that the nutrient elements are taken into the plant in the ionic form. Thus, it makes little difference whether an ion of potassium is derived from potassium chloride or from wood ashes.

The second part of the question would lead us to believe that the questioner is overly concerned about the safety of chemical materials used on turf. Some materials used in turf management are extremely toxic to humans. However, they have been thoroughly tested, and they may not be marketed until Federal control agencies are completely satisfied that their proper use will pose no danger.

Note that we have said *proper use*. When improperly used, even common products such as aspirin or table salt can be hazardous. One need not be afraid of chemical products used on turf if he *reads and heeds* the label instructions.

Question: How does one recognize damage from the Eriophyid mite on bermudagrass? Please recommend a control.

Answer: The damage is very characteristic. Once seen, it will be easily recognized thereafter. The symptoms of injury are shortened internodes. This shortening causes leaves to arise in tufts or witches' brooms.

Diazinon has provided effective control. Mix with water at the rate of one fluid ounce of 12½ percent technical diazinon to one gallon of water; apply at the rate of 5 gallons per 1,000 square feet. In granular form, 10 pounds of 5 percent granular material per 1,000 square feet has provided effective control.

Very finely ground sulfur at the rate of 10 pounds per 1,000 square feet has been effective.