MANAGING TURFGRASS INSECTS Terry Davis Michigan State University

A healthy turf ecosystem will support a large diversity of insect species. Every insect has its niche whether that is predator or parasitoids of other insects, fungus and thatch feeders or turfgrass feeders. In a healthy ecosystem, species of insects that have the potential to become pests can be found. They should not be considered pest problems until two criteria are met. In order for an insect to be considered a pest, there must be large numbers of the pest species present and damage must be occurring or imminently about to happen. Once a pest problem has been identified, it is necessary to carefully monitor the area for the next few years as the problem may occur again. It will also require several years for the "balance of nature" to return to an area treated with an insecticide.

Most insect problems can be dealt with by maintaining a healthy turf and scouting. Most applications made for insect control are made in the insurance mode. Historically, insecticides have been applied to turfgrass as part of a 4-step program or simply to avoid potential problems. As a result of the over application of needless insecticides, several of our major landscape turfgrass tools have been lost or are in the process of being lost. Applications of Dursban or Diazinon were able to take care of any insect problems that arose in home lawns or commercial landscape accounts 5 years ago. Both are now gone.

A spring and fall application of fertilizer and mowing at 3+ inches of height are the two major things that can be done to keep a turf healthy. Irrigation is also a factor that will round out the first two recommendation but is the most difficult to provide or to convince the client to do. Taller grass has a deeper, thicker root system. Proper nutrition will produce thicker turf with a stronger root system. A healthy turf can withstand some insect damage and can heal much quicker when those insects have moved on.

Besides the basic turf health issues, identification, scouting and control measures for chinch bug, billbug, webworms and white grubs will be discussed.