

DISEASES AND INSECTS OF ORNAMENTAL PLANTS

D.L. Roberts

Michigan State University Extension

In addition to our desire for high quality turf, plant health managers are finding that healthy trees, shrubs and herbaceous ornamentals comprise increasingly important components of our environment whether private or commercial landscapes, or golf courses are concerned. Although we are continuing to address the traditional aspects of plant health care, several new problems have surfaced over the past several years. These problems include various insects and diseases which may drastically alter the healthy environment we anticipate to maintain. Turf managers may not be adequately trained to recognize problems on trees and shrubs while approaching the already difficult daily routine of full-time turf management. Yet, that favorite grand old tree bordering the practice green or strategically located at the front entrance to the building may be of vital importance to our clientele. Following are some of the more prominent but often unrecognized insects and diseases on some of the most commonly maintained plants in our environment.

Diplodia Tip Blight:

Diplodia tip blight is a major health consideration for many of our exotic pines and several of our native pines. Austrian, Scotch, Mugo, Red and Ponderosa pines are usually the species most often affected. Native White Pine is generally regarded as resistant. The fungal disease is recognized by blighted shoot tips and dead branches. As trees mature, they generally become more susceptible to the disease, necessitating a more aggressive plant health care program. The disease needs to be treated in the spring beginning slightly before budbreak. Recent research has demonstrated that no fungicide treatment will quickly reverse the disease but that several years of treatment may be required to return trees to a healthy appearance.

Oak Wilt:

Oak wilt has existed in Michigan for many years but our increased abilities at recognition of the disease has led us to conclude that it is a major threat to our native stands of oak trees. Much of Michigan's population exists in an urban forest where our daily practices jeopardize the magnificent and unique oak forests. Land development, warm season pruning and storm damage are leading instigators of oak wilt infections throughout Michigan. Thousands of oaks die each year from oak wilt and we have barely recognized the existence of the disease. Thwarting the activities of this disease, which closely parallels Dutch Elm Disease, will require innovative efforts in education and communication by our industry.

DED:

Dutch Elm Disease continues to destroy many stately American Elm trees every year. It is amazing how many large elms still exist in Michigan. Many of these elms are located in very high value areas. Some have simply escaped this deadly disease but our activities may be encouraging their demise. New research, however controversial it may be, has shown that with increased numbers of injection sites and higher rates of fungicide may help our elms survive the disease.

Insects:

Several insects have become more prevalent over the past several years. They have not been easily recognized and our goal should be to bring these nasty critters more time in the spotlight. **Zimmerman Pine Moth** has truly become a major and devastating insect pest of Austrian pine. **Pine Root Collar Weevil** causes a rather gradual but definitive decline in some of our landscape pine. **Pitch Mass Borer** largely continues unrecognized on many of our spruces. The **Two-lined Chestnut Borer** may be as lethal in some circumstances as oak wilt.

Increasing our knowledge and abilities to recognize these problems will enable us to become better plant health managers for a healthier plant environment.