Arid Zone Trees

Identifying Causes of Unhealthy Trees

It's easy to identify trees in the landscape that are not thriving. It is far more difficult to determine why trees are not growing vigorously and what to do to correct a given situation. Sources of problems could range from insects, soil conditions, fertilization, herbicide injury, maintenance practices, diseases or weather conditions (freezing, excess rainfall, wind damage, sunburn). Using the wrong control strategy can be time consuming , expensive and ineffective. For example, plants with root rot often exhibit wilting symptoms because of the lack of viable roots to extract water from the soil. Applying additional water in response to the wilt symptoms saturates the soil and creates conditions favorable for further root rot.

An accurate diagnosis of the situation is critical. Before seeking help, review the current status of the entire landscape. Have any cultural practices changed recently or were recently completed (irrigation, fertilizer, pest control, pruning)? Have weather conditions followed seasonal norms or is weather in seasonal transition (e.g. winter to spring)? What is the apparent health and vigor of neighboring landscapes? Have you seen similar symptoms in past years? Answering these or similar questions may help you zero in on the problem or at the very least prepare you to discuss the situation with a consultant or county agent. The University of Arizona, College of Agriculture, Cooperative Extension Service has offices in each Arizona county. They are usually listed in the Blue Pages of most phone books. The Cooperative Extension Service offers information by phone and an array of useful publications dealing with the most commonly encountered problems. The county office staff are familiar with common diseases and pests of local landscape trees and can serve as an authoritative source for control options. Most offices can send plant or soil samples to laboratories on the Tucson campus if additional diagnostic work is needed.

Professional, certified arborist can also be a source of answers for tree care questions. These professionals generally offer their services for a fee. If control options include the application of pesticides it is prudent to confer with a qualified professional before spraying. Desert adapted and native desert trees have few insect and disease pests.

With the possible exception of Texas Root Rot and Palo Verde Borer, diseases and insects rarely cause serious damage to desert species. The overwhelming majority of desert landscape tree problems are related to detrimental cultural practices (over or under watering, fertilizing, pruning, shallow or deep planting) or environmental conditions (soil type, drainage, incompatible plant mix, heat and sun exposure). Before initiating changes in cultural practices be certain that the changes will remedy the problem at hand.