

## Sunburn Often Injures Newly Planted Trees

I recently observed a newly planted landscape with a number of severely sunburned plants. Gardeners are often surprised to learn that woody plants can sunburn, especially when the affected plants are species that are adapted to hot, dry conditions. Sunburn injury to plants results when plant tissues become dehydrated after being heated above a critical point by direct sunlight.

Sunburn can affect all above ground plant parts, including leaves, bark, flowers and fruit. In some species, yellow areas develop on the leaves, then become brown or “burned.” In many species sunburned leaves often appear glazed, turning a silvery or reddish brown color. These areas eventually die and turn brown.

Sunburned bark is a common and serious problem in newly planted landscape trees. Sunburned bark initially appears discolored; often a reddish-brown, then becomes dry and sunken. The injured bark soon cracks and peels, and the area becomes susceptible to attack by wood-boring insects and wood decay. In fact you almost always find evidence of insect borer injury in trees that have sunburned bark. Sunburned trunks and limbs can develop cankers, become girdled, and die. As you might expect, sunburn injury to bark is usually most severe on the south or southwest sides of trunk and branches, where the sunlight is most intense.

Young trees and shrubs have thin bark, and may not tolerate the hot sun right away, especially if they do not receive adequate irrigation. Trees become more resistant to sunburn as they grow older and develop thicker bark. However, even old trees can be damaged if you expose inner branches to the hot sun by pruning heavily, especially during the hot summer months. Removing taller trees that provide shade or adding pavement or buildings that reflect

light onto plants can also lead to sunburn. Even in well-watered soil, sunburn may injure bark if the plants are unable to pick up enough moisture when it’s hot.

You can prevent sunburn with proper planting, watering and pruning practices. With newly-planted trees, do not remove any leaves that may be growing along the trunk, at least for the first year. Those leaves not only shade the bark, but help nourish the trunk and root system. If there is no foliage growing along the trunk of a newly planted tree, especially if the tree is in a hot, sunny location, consider painting the trunk with white interior latex paint to lower the bark temperature. Old bark that has been recently exposed to the sun by pruning or limb breakage can also be painted white. Wood chips and other organic mulches can also reduce reflected heat and light, reducing the danger of sunburn. Most importantly, be sure to apply adequate water, especially to newly planted trees.

One of the best ways of avoiding sunburned plants is to choose plants that are adapted to the planting site. Do not try to grow shade-loving plants in full sun. Also remember that even sun-loving plants will be sunburned if they’re growing in dry soil. You need to provide your plants adequate irrigation water to prevent most sunburning problems. If you notice the symptoms early enough, you may be able to restore the color to sunburned leaves before they are killed.