

Plant Health Care for Ficus Plants following Ficus Whitefly Damage

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Ficus whitefly damage, especially at levels that lead to extensive defoliation (Fig. 1), causes stress to ficus plants. However, most plants will recover with some extra care and attention. Here are some tips to help your trees recover.

De-stressing. Avoid or minimize additional stress to defoliated plants. Stress can be caused by under- or overwatering, excessive fertilizer use, sudden excessive solar radiation, and loss of energy from pruning.

Irrigation. Water your ficus plants at least once every five days until they grow new leaves, and then at least once a week through the summer. The amount of time and quantity of water needed to sufficiently water your plants depends on your irrigation system, weather, and type of soil. Roots absorb most of the water at the "drip line" (the area below the edge of the plant's canopy) and beyond. This area should be irrigated to a depth of 2 feet for shrubs and 3 feet for trees. Avoid applying water at the base of the trunk of established trees. For more information on irrigation, see <http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1298.pdf>.

Mulching. Consider applying 3 inches of organic mulch under the canopy. This will greatly aid recovery during summer months by cooling the soil, moderating moisture loss, and supporting soil microorganisms. Keep mulch at least one foot away from the base of plants to prevent fungal activity.

Fertilizing infested trees. It is not necessary to fertilize a defoliated tree; a mature healthy tree should have enough stored energy to produce new leaves after moderate defoliation. Although not necessary, a light fertilizer application may be helpful for severely defoliated younger trees. Carefully follow label instructions for application rates. Excessive fertilizer in the soil will do more harm than good by damaging fine absorbing roots and negatively impacting soil microorganisms that support tree health and recovery. Fertilize if nutrient deficiency symptoms, distinct from whitefly damage symptoms, are visible in the leaves.

Sunburn on defoliated branches. Protect branches against sunburn where severe defoliation occurred. Small trees can be covered with a shade cloth until enough new leaves are fully formed and shading a majority of branches (Fig. 2). Defoliated branch sections can also be protected with tree paint. Pay particular attention to the southwest and west facing areas. Remove shade cloth in early fall to allow maximum photosynthesis and energy recovery. Shade cloths typically range from 30–90% shade. To allow adequate sunlight for photosynthesis, use a 50% shade cloth (Fig. 3).

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Figure 1. Severely defoliated ficus plant (*Ficus benjamina*)

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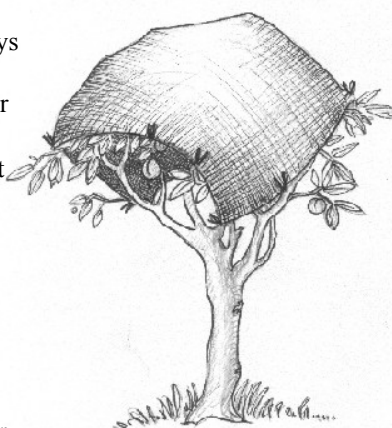


Figure 2. Use of shade cloth to protect defoliated tree branches
Source: www.ehp.qld.gov.au,
Illustration: Louise Saunders



Figure 3. Use of 50% shade cloth to allow adequate sunlight and prevent over-shading

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Shade cloths are easily held in place with metal binder clips or twine on small trees and individual branches (Fig. 2). Hog clips and double-sided duct tape can be used to connect multiple cloths for larger trees. In the first season, do not prune out even dead branches. They provide additional shade and scaffolding for attaching shade cloth. Dead branches can be removed in the fall after removing the shade cloth.

Prevent future infestations. Remove clippings and fallen leaves immediately, and dispose of them properly. Nymphs on fallen leaves can survive and emerge as adults, which can continue the infestation. Encourage natural biological control by avoiding broad-spectrum insecticide sprays that kill beneficial predators and parasitoids, whenever possible. Watch out for new infestations of nymphs on newly emerging leaves and treat to prevent the buildup of large insect populations. Best results are with soil-applied insecticides that are designed for uptake by the plant.

Also see:

Mannion, C. 2010. Ficus whitefly management in the landscape.
http://cirs.ucr.edu/pdf/ficus_whitefly_feb2010_fact_sheet.pdf.
University of Florida Cooperative Extension.

A PDF of this publication is available on-line at:
http://cals.arizona.edu/apmc/docs/Ficus_Whitefly_Short3.pdf

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