

Cercospora Leaf Spot of Fig¹

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INTRODUCTION: *Ficus carica* L. (Moraceae), the common edible fig native to the Mediterranean region, is one of the oldest cultivated plants. Records of its popularity date to the 4th century B.C. It was introduced into the New World by Spanish explorers (Condit 1955). The fig is grown both as an attractive tree or shrub in ornamental plantings (Everett 1981) and for fruit. In the United States, most commercial fig plantations are found in the warm interior valleys of California (Ortho Books 1985). When fully dormant, a fig tree can withstand temperatures of 12 to 15F. Because of their low chilling requirements (less than 300 hours), figs will sometimes break dormancy during warm spells in the winter or early spring, only to be damaged when cold weather returns. The geographic habitat range of *F. carica* in the United States is shown (Fig. 1) (Ortho Books 1985). In Florida, the three main pests / diseases of fig are root knot nematodes (*Meloidogyne* spp.), leaf rust (*Cerotelium fici* (E. J. Butler) Arth.), and *Cercospora fici* Heald and F. A. Wolf (Chupp 1953).

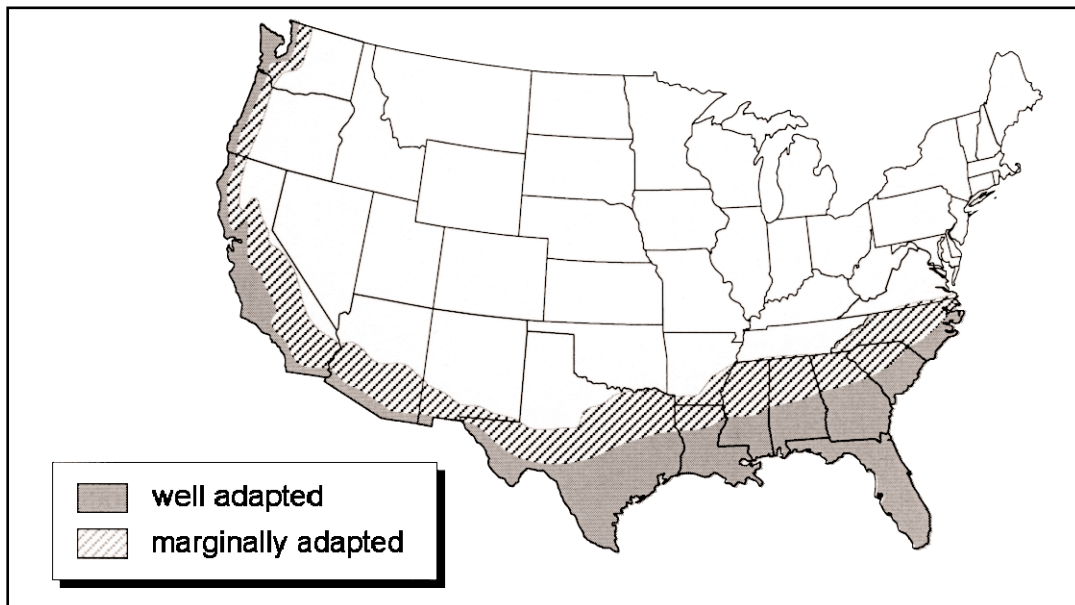


Fig. 1. Range of habitat of *Ficus carica* in the continental United States. *C. fici* occurs throughout this range.

CAUSAL AGENT AND DISTRIBUTION: *Cercospora fici* is the most common of the four *Cercospora* leaf spots on fig, and is but one of an array of other leaf spotting microorganisms affecting fig (Alfieri *et al.* 1994; Farr *et al.* 1989). *C. fici* occurs essentially wherever figs are grown (see fig range map, Fig. 1) (Chupp 1953; Farr *et al.* 1989).

SYMPTOMS: Initially, leaf spots are reddish brown, angular to irregular in shape. Upon enlargement, spots show a tan center and a dark brown margin, with a slight, diffuse yellow halo. Individual leaf spots are up to 8 mm across and may coalesce (Fig. 2). Under favorable conditions for disease development (*i.e.*, summer rains), the fungus spreads rapidly and infects the foliage. Severe infection can result in leaf drop (Simone and Mullin 1998).

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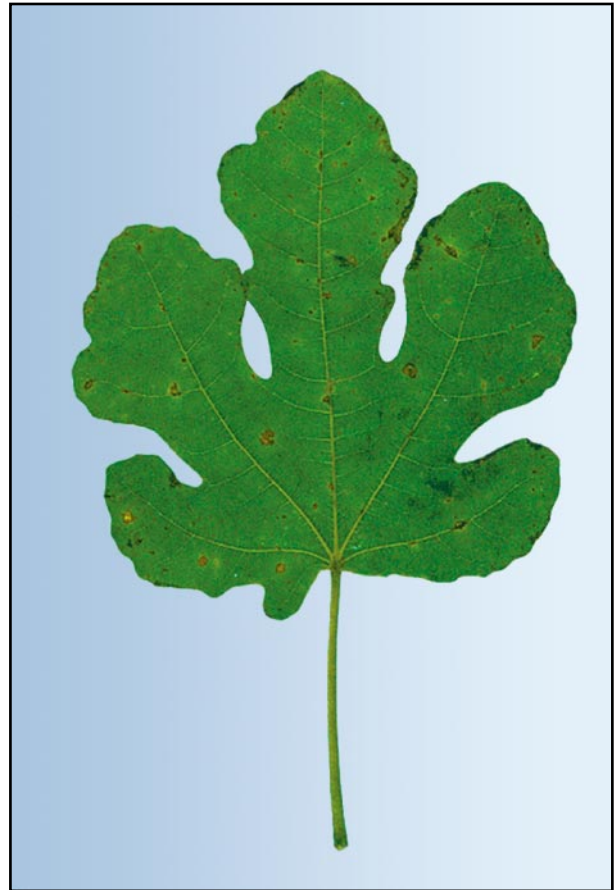
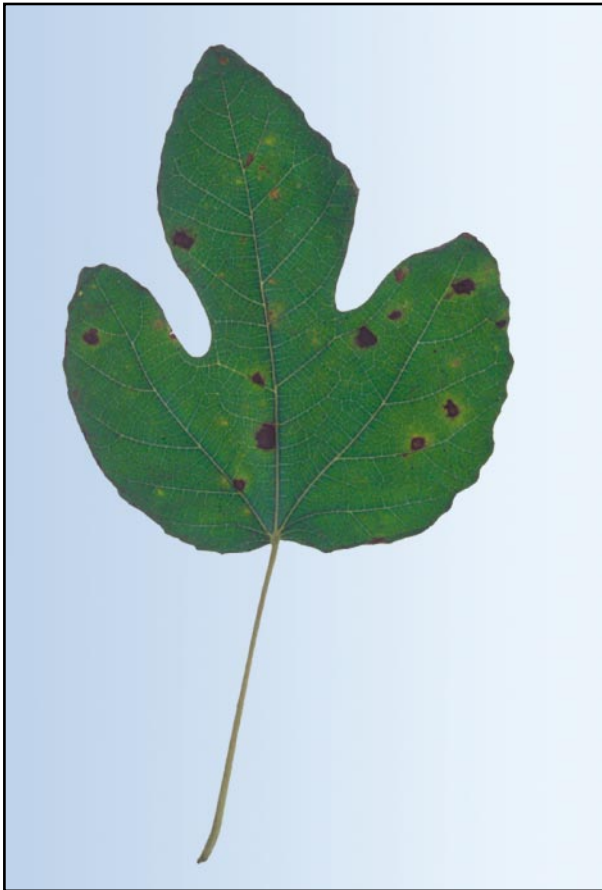


Fig. 2. Leaf spot disease of *Ficus carica* caused by *Cercospora fici* (Photography credit: Jane Windsor):

A) Upper leaf surface.

B) Lower leaf surface.

CONTROL: Prune to improve air circulation in the plant canopy and around planting. Avoid wetting the foliage when irrigating. Fallen infected leaves should be collected and either composted or destroyed during the dormant period to reduce inoculum for the next season (Simone and Mullin 1998). Figs must be grown organically for the most part because there are no EPA registered fungicides for edible fig (Adams and Leroy 1992).

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