Clinical Importance
Figs can cause irritant reactions with erythema, ulceration, or bullae; phototoxic reactions with bullae and hyperpigmentation sometimes followed by depigmentation and keloids; and chronic eczema with paronychia. These dermatoses occur in those who cultivate, gather, pack, or consume figs. The ability of fig plant extracts to stimulate pigmentation in vitiligo patients has been known for almost 2000 years, and in India fig extracts are used to treat eczema and psoriasis. In addition, the latex has been used as a treatment for warts.

Family
The family Moraceae (the mulberry family) contains 53 genera with about 1400 species, approximately 800 of which are in the genus Ficus. Family members include trees, shrubs, lianes, and herbs that usually have lacticifers with a milky latex.

Distribution of Plant
Ficus carica is probably a native of southwest Asia that rapidly spread to the Mediterranean region, where it was cultivated in Egypt at least 6000 years ago. Today the fig is cultivated mainly in temperate climates throughout the world but also thrives in tropical and subtropical regions. Ficus carica can grow among rocks, in woods, and in hot, dry soils. The first figs in the New World were planted in Mexico in 1560. In 1669, Europeans sent figs to Virginia; they were brought to California in 1769.

Nomenclature
The word Moraceae is derived from the Latin name for the mulberry tree, and ficus is the Latin name for fig tree. Carica probably comes from the Latin carricare meaning “to load,” suggesting a tree loaded with figs.

Identifying Features/Plant facts
Ficus carica (the common fig tree) should not be confused with Ficus benjamina (the weeping fig), a common ornamental. Both are used for decorative purposes or to produce shade in hot climates. However, when one speaks of eating figs, he is referring to the fruit of Ficus carica. Figs are the most commonly mentioned food plant in the Bible, with at least 56 references in the Old and New Testaments. Ficus carica is a deciduous tree that grows 10 to 30 feet tall. It has numerous spreading branches, but the trunk rarely grows to a diameter greater than 7 inches. The simple palmate leaves are deeply divided into 3 to 7 main lobes and extend up to 10 inches in length and width (Figure 1). The leaves are thick and rough on the upper surface but soft and hairy on the underside. The fruit is

Figure 1. A young tree of Ficus carica L. about 3-feet tall. Note the palmate leaves with “fingers” radiating as from the palm of a hand.
technically a synconium (a fleshy hollow receptacle with a small opening at the apex partly closed by small scales). It may be obovoid, turbinate, or pear-shaped, 1 to 4 inches long and varies in color from yellowish-green to coppery, bronze, or dark purple (Figure 2).

Dermatitis-Inducing Plant Parts
Irritant dermatitis has been reported from contact with small hairs (trichomes) on the undersurface of *Ficus carica* leaves. This suggests that fig leaves would have made most unsuitable clothing for Adam and Eve. The latex contains ficin, a proteolytic enzyme that causes pruritus and acts as an irritant on inflamed skin. The milky latex found in the leaves and stems seems to contain the irritant and phototoxic chemicals, although one case report suggests that the fruit also contains photosensitizers.

Phototoxic Agents
Two studies have detected furocoumarins in parts of *Ficus carica*. In both studies, fig leaves were examined. Examination revealed that psoralens and bergapten (5-methoxypsoralen) were present throughout the growing season, and psoralens were always more plentiful (3- to 8-fold more than versus bergapten). Furocoumarins usually are more plentiful in leaf sap than in shoot sap, and concentrations are higher in spring and summer than in fall. Zaynoun et al studied the presence of furocoumarins in the shoot sap and fruit and found no phototoxic coumarins in the seeds, peels, or fruit of ripe or unripe figs. This seems to contradict a study conducted by Ippen demonstrating clinical phytophotodermatitis following contact with fresh figs. Perhaps the figs in this study had been contaminated by leaf or shoot sap. Alternatively, the fruit of individual fig plants may either contain or lack furocoumarins.

REFERENCES