



Texas Walnuts

George Ray McEachern and Jerral Johnson Extension Horticulturist and Extension Plant Pathologist Texas A&M University College Station, TX 77843-2134 January 27, 1997

The Persian, English, or Carpathian Walnut is grown worldwide. California produces 95 percent of the walnuts grown in the United States.

Walnut Blight

The varieties grown in California do not produce well in Texas because of a bacterial disease called "Walnut Blight." The trees look vigorous and are strong, but the flowers fail to set fruit or the fruit fails to ripen properly due to the bacterium which overwinters on infected buds and to a lesser extent, in twig cankers. During the spring, the pathogen is spread by rain and wind. During heavy spring rains, severe damage can occur because the nuts are most susceptible at this time. The bacteria can infect catkins and can contaminate pollen, both of which can spread blight infection to the flowers. Kocide 101 spray at a rate of 2 pounds per 100 gallons of water will be needed with the conditions of prolonged high humidity. Tree damage can occur from excessive use of copper sprays such as Kocide 101 or the old Bordeaux mix and caution is recommended when spraying. Always follow fungicide label instructions.

Rootstocks

Advances have been made in Texas walnut culture by Dr. Loy Shreve. He demonstrated that the native Texas Black Walnut, Juglans microcarpa, is a far superior rootstock for walnuts growing in high pH soils of Texas than the Eastern Black Walnut, Juglans nigra, or the California Black Walnut, Juglans hindsii. Growth of 10 feet or more the first year has been obtained with the Texas Black Walnut rootstock. Other rootstocks made little or no growth.

Cultivars

The need for an outstanding variety with "Walnut Blight" resistance has long been appreciated by Dr. Shreve. He traveled to Hungary and Romania in 1979 and collected several promising cultivars which were evaluated at the TAMU Center at Uvalde. The best cultivars to date are Reda, Geoagiu 86, Orastie, Germisara, and Geoagiu 3 X 4 X 453. Under Texas conditions, these cultivars appear to be superior to the standard commercial varieties Payne, Eureka, Hartley, and Broadview.

General walnut cultural practices are very similar to that of the pecan and it is recommended that they be followed. For specific information on walnut care contact Dr. Larry A. Stein, Extension Horticulturist, P.O. Box 1849, Uvalde, TX 78802-1849.