***Corchorus hirsutus* L.** jack-switch
TILIACEAE

Synonyms: none

General Description.—Jack-switch, also known as wooly corchorus, mallet, cadillo, and malvavisco, is an upright woody to semiprostrate shrub usually about 1 m in height but sometimes reaching 2 m and 1.5 cm in basal diameter. It usually has a single main stem and a somewhat sparse, open crown. Plants examined by the author had a deep taproot and fine lateral roots at all levels. All parts except older branches and stems are densely pale scruffy tomentulose with stellate hairs. The alternate leaves are ovate to oblong-lanceolate, 2 to 6 cm long, have crenate to serrate margins and obtuse to acute tips, and have petioles 2 to 7 mm long. The leaves, which have a gray-green color, tend to wilt rather than defoliate during dry seasons. Yellow flowers occur in groups of two to eight on axillary peduncles opposite the leaves. The four-chambered capsules are ellipsoidal, about 12 mm long, and contain a number of 1.5- to 2-mm black seeds (Britton and Millspaugh 1962, Howard 1989, Liogier 1994).

Range.—Jack-switch is native throughout the West Indies and has been reported from Mexico through Central and South America and in northeastern Africa (Britton and Millspaugh 1962, Howard 1989, Liogier 1994). Herbarium specimens exist for Bolivia and Paraguay (Missouri Botanical Garden 2002). The species is present as an exotic in the southern tip of Florida (Institute of Systematic Botany 2002).

Ecology.—Jack-switch is intolerant of shade and grows in open areas or openings in low forest. It cannot endure severe competition. The species usually grows near the coast or inland on dry, often excessively-drained sites. These are usually coastal sands or rocky ridges and hillsides over limestone, igneous, and metamorphic (including ultramaphic) rocks. Jack-switch occurs as scattered plants or as open stands with other species of similar size. Because cattle do not eat or rarely eat the foliage, the species benefits from over-grazing. It also invades eroded and physically disturbed soils.

Reproduction.—Jack-switch blooms continuously, except during periods of drought. The species is insect pollinated (Marcano-Fondeur 1973). Capsules collected in Puerto Rico averaged 28.0 seeds/capsule. Air-dried seeds from that collection averaged 1.109 million seeds/kg. Sown without pretreatment on the surface of wet peat, 10 percent germinated over a 4-month period (author's observation). Dispersal undoubtedly occurs by wind and water; specialized means of seed dispersal are unknown. Seedlings in wildland sites in Puerto Rico vary from common to rare. Plants apparently do not renew themselves by resprouting after stem death. Reaction to fire is unknown.

Growth and Management.—Jack-switch plants have a moderate to slow growth rate and live about 5 years. Mechanical soil disturbance near seed sources and heavy grazing would probably lead to natural establishment of the shrubs. Jack-switch is seldom common enough to warrant control, but if needed, mowing may be sufficient.

Benefits.—Jack-switch furnishes cover for wildlife and helps protect the soil. The plant is attractive enough to be used as an ornamental in natural landscaping, although that use is not yet reported. It is a honey plant (Marcano-Fondeur 1973). The leaves are cooked and eaten, and made into tea in St. Croix, U.S. Virgin Islands. Branches were formerly used to make brooms (Garland 2002).

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