

***Mimosa arenosa* (Willd.) Poir.**
FABACEAE

tepehuiste

Synonyms: *Acacia arenosa* Willd.
Acacia malacocentra Mart.
Mimosa caudero L.
Mimosa leiocarpa DC.
Mimosa malacocentra (Mart.) Benth.
Mimosa xantholasia Benth.



General Description.—Tepehuiste is a thorny shrub or tree usually 3 to 5 m (up to 12 m) in height and stem diameters to 15 cm or more. Young and undisturbed plants have a single stem that may branch several times near the ground. As trees become older and heavier, they tend to lie down and produce new, vertical sprouts. Sometimes, the mid section of the trunk is thicker than the base. The hard, somewhat flexible wood has light tan sapwood and light brown or brown heartwood. The plant is supported by a tap and lateral root system of brown, strong, and flexible roots. Stems are covered by dark brown, shallowly furrowed bark. The inner bark is green. Twigs are greenish brown with 3 to 4 mm, curved spines. The alternate, compound leaves commonly have four to 22 pinnae each with 15 to 35 pairs of

leaflets. Inflorescences are 6-cm spikes with paniculiform branching bearing many tiny, white flowers. The fruits, which are borne in clusters, are linear-oblong, flat, brown legumes, 4 to 5 cm long by 5 to 6 mm broad. The seeds are yellow, flattened, and about 4.5 by 5 mm wide and long (author's observations, Liogier 1988, Stevens and others 2001).

Range.—Tepehuiste is native to South America from Colombia and Venezuela through Brazil and lowland Bolivia. It is possibly native to Mexico (recorded in Jalisco State) and Nicaragua. Populations in Puerto Rico and the Dominican Republic were introduced and have become naturalized (Liogier 1988, Missouri Botanical Garden 2002, New York Botanical Garden 2002, Stevens and others 2001).

Ecology.—Tepehuiste is intolerant of shade. It competes rigorously with grass, herbs, and low shrubs but cannot survive overtopping by tall trees. The Puerto Rican populations occur in areas that receive from 1200 to 1600 mm of mean annual precipitation on well-drained to somewhat poorly-drained sites. Tepehuiste does not appear to compete or survive on rocky, excessively well-drained sites. The species grows at elevations from near sea level to 500 m in Nicaragua. Tepehuiste grows in catinga (scrub) forest in Brazil, savannas in Nicaragua, and vacant lots, roadsides, fencerows, and neglected pastures in Puerto Rico (author's observations, Nunez de Medeiros 2002, Stevens and others 2001).

Reproduction.—Tepehuiste blooms June through September and fruits September and October in Nicaragua (Stevens and others 2001). The author observed stands in Puerto Rico in bloom in March and other stands with heavy seed crops during that same period. Insects pollinate the flowers. Fruits collected in Puerto Rico averaged 7.0 ± 0.2 seeds/pod. Seeds separated from them weighed an

average of 0.0054 ± 0.0006 g/seed or 186,000 seeds/kg. One percent of unscarified seed germinated in 6 months. but a lot of mechanically scarified seed germinated at 99 percent between 3 and 5 days after sowing on moist filter paper (author's observation). Germination is epigeal (Parra 1984). Plants sprout when cut or burned.

Growth and Management.—Tepehuiste grows rapidly. Because the species is thorny, forms almost impenetrable thickets, and aggressively invades pastures and rangeland, it is a highly undesirable species in exotic habitats. Every effort should be made to prevent it from invading new areas. Control techniques have not been published. However, the same measures used against *Mimosa pigra* L. probably would be effective.

Benefits.—Tepehuiste helps sites move through the grass stage to secondary forest, protects the soil, and provides cover for wildlife. It is an important forage plant for goats in northeastern Brazil (Nunez de Medeiros 2002). The wood is useful for fuel.

References

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