

Ebenopsis ebano (Berl.) Barneby & Grimes

Texas ebony

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Synonyms. *Pithecellobium flexicaule* (Benth.) Coult., *P. ebano* (Berl.) C.H. Muller, *Mimosa ebano* Berl., *Acacia flexicaulis* Benth.

Other common names. ebony blackbead, ape's earring

Growth habit, occurrence, and use. *Ebenopsis* is a small genus, with only 2 species found in the United States. Texas ebony occurs in Mexico and southern Texas and is the most valuable tree in the Rio Grande Valley. The species was formerly placed in the genus *Pithecellobium*; nomenclature of these species is discussed briefly in the *Pithecellobium* chapter of this book. The wood of Texas ebony is used for furniture and fence posts, and the seeds can be used as a coffee substitute (they are boiled when green or roasted when ripe) (Vines 1960).

Flowering and fruiting. Texas ebony flowers are yellow or cream-colored umbels about 4 cm in length borne in panicle clusters on the end of twigs. They appear from June to August (Vines 1960). The legumes turn from green to dark brown or black as they mature in the fall. They are flat, about 13 cm long, and 2.5 cm wide (figure 1). The legumes are also indehiscent and may remain on the trees for a year or more. The seeds are reddish-brown, bean-shaped, and about 1.5 cm long (figures 2 and 3). Weights range from 1,550 to 1,990 seeds/kg (700 to 900/lb) (Walters and others 1974).

Collection, extraction, and storage. Legumes are usually picked by hand from the trees and air-dried in the sun. Seeds can be extracted by hand-flailing or by using mechanical macerators. Legume fragments can be removed with screens. There are no long-term storage data for Texas ebony, but it is a typical hardseeded legume with orthodox storage behavior. Storing seeds for several years should be easy at low moisture contents (<10%) and temperatures of 2 to 5 EC (Walters and others 1974).

Germination. The seedcoats of Texas ebony are very hard, and few seeds will germinate without scarification. Soaking in sulfuric acid for 30 to 150 minutes has yielded germination of 78 to 88% (Alaniz and Everitt 1978; Vora 1989). This wide variation in soaking times suggests considerable variation in hardness of the seedcoats. In such cases, time trials should be carried out with small samples to choose the optimum soaking period for a given seed lot. Official seed testing organizations do not include Texas ebony in their prescriptions for

testing, but alternating temperatures of 15 and 30 EC have been quite successful following acid scarification (Alaniz and Everitt 1978).

Nursery practice. There is little information on nursery practices for Texas ebony. Nurserybed densities of 160 to 215/m² (15 to 20/ft²) appear to be suitable for *Albizia saman*, a similar species (Walters and others 1974), and the same is suggested for Texas ebony. Optimum planting depth in a greenhouse was reported to be 1 cm (0.4 in) (Alaniz and Everitt 1978). Direct seeding in old fields in Texas was improved by mulching the seeds with a commercial straw blanket (Vora and others 1988), and either mulching or shading would seem to be beneficial in nursery beds in that region.

References

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Figure 1—*Ebenopsis ebano*, Texas ebony: legume, H ½.

Figure 2—*Ebenopsis ebano*, Texas ebony: seeds, H 2.

Figure 3—*Ebenopsis ebano*, Texas ebony: longitudinal section through a seed, H 3.