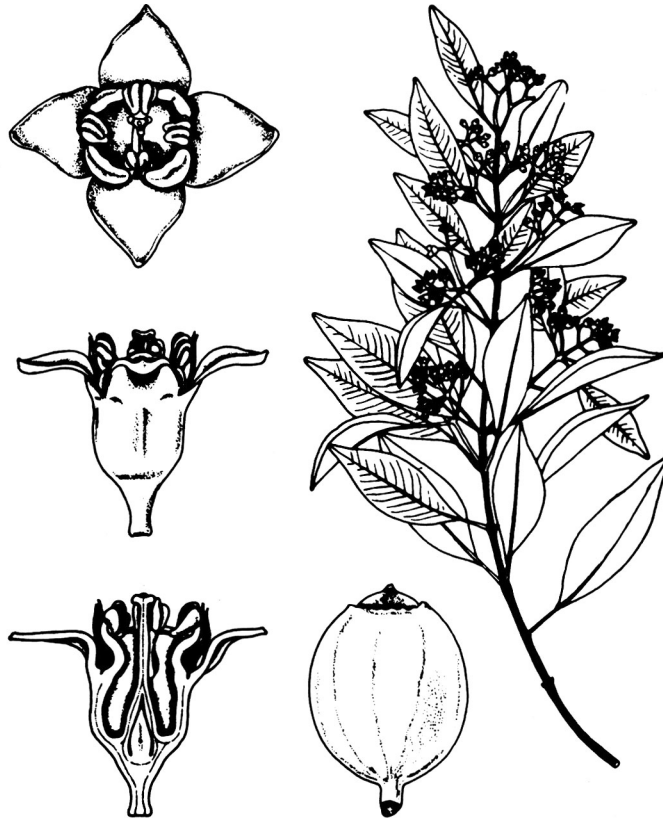


307. *SANTALUM ALBUM* L. (SANTALACEAE) — Sandalwood

Sandalwood oil is widely used as a fragrance ingredient in creams, detergents, incenses, lotions, perfumes, and soaps. Also, used as a flavor component in beverages, baked goods, candies, liqueurs, gelatins, and puddings, with reported average maximum use levels generally below 0.001%. The oil has a wide array of folk medicinal applications. Chinese import the wood for furniture, saving the scraps for medicine.<sup>16</sup> In Malaya the leaves are smoked with those of *Mimusops* (perhaps, strictly medicinal, for asthma). The oil has diuretic and urinary antiseptic properties.<sup>29</sup> Sandalwood is one of the finest woods for carving, next only to ivory for intricate workmanship. The endosperm of the seed is edible.<sup>1</sup>

Reported to be anodyne, antiseptic, astringent, carminative, diaphoretic, diuretic, expectorant, febrifuge, stimulant, stomachic, sandalwood is a folk remedy for acne, boneache, bronchitis, cholera, cystitis, diarrhea, dysentery, dyspepsia, elephantiasis, enteralgia, gastralgia, gleet, gonorrhea, headache, hiccups, nausea, skin ailments, splenosis, stomachache, tumors, urethritis, and urogenital ailments.<sup>16,32,33</sup> The seed is used for skin diseases.

Sandalwood oil contains 90% alpha- and beta-santalols. Minor constituents include *circa* 6% sesquiterpene hydrocarbons (mostly alpha- and beta-santalenes and epi-beta-santalene; small amounts of alpha- and beta-curcumenes, possibly beta-farnesene, and dendrolasin), dihydro-beta-agarofuran, santene, teresantol, borneol, teresantallic acid, tricycloekasantalal, santalone, and santanol, among others. Alpha-santalol and beta-santalol account for most of the odor of sandalwood oil.<sup>29</sup> Demole et al. blame 2-furfuryl pyrrole.<sup>284</sup> Seeds yield 50 to 55% of a dark red viscid fixed oil containing stearolic acid (9-octadecynoic acid) and santalbic acid (11-octadecen-9-ynoic acid). Oil of the fruit contains santalbic-, palmitic-,