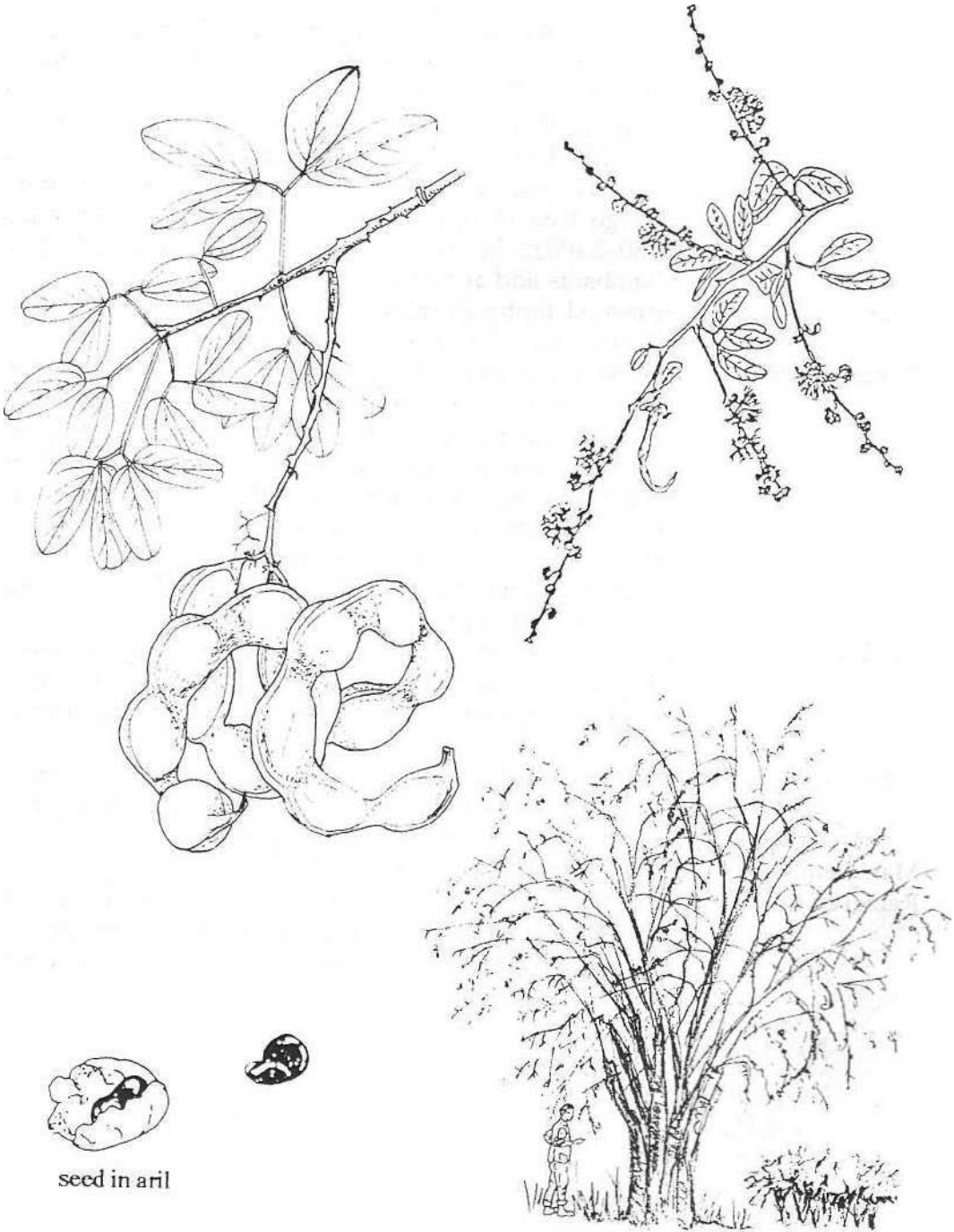


Central and South America

- Common names: Eng: Madras thorn, Manila tamarind; Swah: mkwaju wa kihindi, maramata.
- Ecology: The natural range for *P. duke* is Mexico, Central America, and northern South America. It is tolerant of most soils including very poor sands and wet salty soils. It tolerates arid and semi-arid conditions. In Tanzania *P. dulce* has been extensively planted for shade and as a hedge plant, mainly along the coast, 0-1,600 m.
- Uses: Firewood, timber (general construction), poles, food and drink (fruit pulp), fodder (leaves, pods, seeds), bee forage, soil conservation, shade, ornamental, windbreak, tannin, gum (bark), oil (seeds), soap (oil), live fence.
- Description: A thin shapeless shrub or tree 4—15 m, armed with short spines at the base of each leaf pair. BARK: pale and smooth with horizontal marks, bole short, young branches thorny, drooping. LEAVES: thin stalks bear two pairs of leaflet; each to 5 cm, asymmetric oval, the tip rounded or notched. FLOWERS: small, cream-yellow on a short stalk, bunches of green-white stamens, 1 cm across. FRUIT: heavy pods, about 12 cm, spirally twisted, constricted between seeds. red when mature, splitting to release glossy black seeds almost covered with the fleshy red and white edible aril. A sweet pulp surrounds the seeds.
- Seedlings, direct sowing, cuttings. No. of seeds per kg: 7,000-26,000. Germination is very good and fast, 95% after 2 weeks.
- Propagation: Seed info.: none, or soak in cold water for 6 hours.
- treatment: storage: can be stored up to one year if kept dry and free from insects.
- Management: Fast growing; coppicing, trimming (for live fence).
- Remarks: The species has the potential of becoming a weed if not well managed. It is popular as a spiny hedge but often confused with *Acacia Senegal*. It is extremely drought resistant and fast growing, coppicing well and can withstand heavy browsing or cutting for fodder.



seed in aril