

Euchresteae (28.01)

Genus: *Euchresta* J.J. Bennett

Phylogenetic Number: 28.01.

Tribe: Euchresteae.

Species Studied—Species in Genus: 2 spp.—4 spp.

Fruit a legume; unilocular; $1.2\text{--}2.2 \times 0.8\text{--}1 \times 0.5\text{--}0.6$ cm; with deciduous corolla; with deciduous calyx without orifice formed by curving of fruit or fruit segments; straight; not plicate; not twisted; symmetrical; oblong; not inflated; compressed; without beak; rounded at apex; apex aligned with longitudinal axis of fruit; rounded at base; base aligned with longitudinal axis of fruit; with the apex and base uniform in texture; fleshy (when fresh), drupaceous, or leathery (when dry); seed chambers externally invisible. Fruit margin not constricted; without sulcus; plain. Fruit wings absent. Fruit stipitate to substipitate; with the stipe 3–12 mm long. Fruit indehiscent. Replum invisible. Epicarp dull or glossy; monochrome; violet-black; glabrous; eglandular; without spines; smooth or not smooth; with elevated features; not veined; not tuberculate; wrinkled; not exfoliating; without cracks. Mesocarp thin; 1-layered; without balsamic vesicles; without fibers; spongy; coriaceous. Endocarp dull; monochrome; tan; cobwebby or spongy; nonseptate; not exfoliating; remaining fused to epicarp; entire. Seed 1; length parallel with fruit length. Funiculus less than 0.5 mm long; of 1 length only; straight. Aril absent.

Seed $12\text{--}20 \times 6\text{--}8 \times 3\text{--}4$ mm; not overgrown; not angular; symmetrical; oblong; compressed; without visible radicle and cotyledon lobes; without umbo on seed faces. Testa not adhering to endocarp; dull; not modified by a bloom; colored; monochrome; tan; glabrous; smooth; chartaceous. Pleurogram absent. Fracture lines absent. Rim absent. Raphe from hilum to near base of seed and terminating; not bifurcating; darker than testa; black; raised. Hilum visible; without faboid split; punctiform; subapical to radicle tip; flush; not within corona, halo, or rim. Endosperm absent. Cotyledons smooth; both outer faces convex; both the same thickness; both more or less of equal length; not folded; margin entire 180 degrees from base of radicle; completely concealing radicle; split over radicle; with lobes; with the interface division terminating at base of radicle; without margins recessed; red. Cotyledons inner face flat; glabrous around base of radicle;

embryonic axis right angled. Embryonic axis perpendicular to length of seed; radicle linear; radicle with 90 degree turn. Radicle centered between cotyledons; less than one half length of cotyledons. Plumule rudimentary; glabrous.

Distribution: Northeastern India to southern Japan to Philippines and Malay Islands.

Notes: Ohashi (1978) reported on the taxonomy and distribution of *E. japonica* (J.D. Hooker) E.A. von Regel and concluded that *E. trifoliolata* E.D. Merrill is a synonym. Therefore, the number of species is four, not five. The testa is fragile and difficult to completely separate from the endocarp. The cotyledons are free of the testa and rattle when seeds are shaken. Apparently seeds germinate while still in the moist fruit. Our seed measurements are based on interior fruit measurements because the testae were too fragile to measure.

Euchresta: *E. horsfieldii* (J.B.L.T. Lescherault de la Tour) J.J. Bennett (*D–F*), *E. spp.* (*A–C*). *A*, Fruits ($\times 2.1$); *B*, open fruit ($\times 3.7$); *C*, seeds ($\times 3.7$); *D–E*, testa ($\times 50$, $\times 1000$); *F*, embryos ($\times 2$).

