Operculina riedeliana (Oliv.) Ooststr.

Family: Convulvulaceae


Stem

Vine stem diameters to 5 cm recorded. Included bark produces a milky exudate.

Leaves

Twigs and petioles produce a milky exudate. Leaf blades about 5.5-14 x 4.5-13 cm, petioles about 1.5-5.5 cm long. Marginal teeth small and inconspicuous. Leaf blade margins undulate. Lateral veins about 10 on each side of the midrib. Juvenile or intermediate leaves much longer than wide, about 12.5-17 x 4-4.5 cm. Domatia are inconspicuous foveoles. Twigs quite pithy, pith white.

Flowers

Flowers borne on thick pedicels about 2.5-3 cm long. Sepals dirty green brown in colour, +/- orbicular, about 13-017 mm long. Corolla about 4-5 cm long, broadly funnel-shaped. Anthers brown, about 6 mm long, staminal filaments about 12-13 mm long. Pollen white, surface smooth. Fide Ooststroom (1953). Ovary seated on a white disk. Ovary about 2 mm long. Style +/- 2-lobed, each lobe about 1 mm diam. Ovules 5-6 per locule.

Fruit

Fruits depressed globular, about 12-15 x 18-22 mm, very thin walled at maturity. Pedicels about 25 mm long, rather thick towards the apex. Sepals 5, orbicular, about 20 x 25 mm, persistent at the base of the fruit. Seeds up to four per fruit, each seed about 6-7 x 4.5-7 mm with two bands of short papillose hairs running around each seed. Each seed appears to have a two-layered testa, the outer testa thin, hairy and membranous, while the inner testa is exceedingly hard and horny. Cotyledons folded many times in a complex fashion. Endosperm intrusions visible between the folds in the cotyledons. Radicle about 6 mm long, slightly curved.

Seedlings

Cotyledons about 25-33 x 25-30 mm, deeply bilobed or notched at the apex, base auriculate, +/- 6-veined, the midrib divided into two veins near the base and not extending as a single entity towards the apex. Oil dots visible to the naked eye. First leaves glabrous, cordate to triangular, apex acuminate, base cordate to auriculate. At the tenth leaf stage: stem twining, leaf blade glabrous, cordate to linear-lanceolate, apex acute to almost subulate or acuminate, base cordate to obtuse. Margin undulate to shallowly crenate. Midrib depressed on the upper surface. 'Oil dots' very small, barely visible with a lens. Seed germination time 11 to 239 days.

Distribution and Ecology

Occurs in CYP, NEQ and CEQ. Altitudinal range from near sea level to 200 m. Grows in gallery forest and rain forest. Also occurs in New Guinea and other parts of Malesia.

Synonyms

Ipomoea riedeliana Oliv., Hooker, Icones Plantarum Ser. III 1: 5(1883), Type: Indonesia?.

RFK Code

2124
Cotyledon stage, epigeal germination. © CSIRO

Vine stem bark and vine stem transverse section. © CSIRO

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