

Piper macropiper Pennant

Family:
Piperaceae

Pennant, T. (1800) *Outl. Globe* 4: 242. Type: Indonesia, Moluccas; illustration in Rumphius, *Herb. Amboin.* 5: t. 28 fig. 1 (1717)

Stem

Vine stem diameters to 8 cm recorded. Blaze odour strong and spicy or difficult to describe. Blaze darkens on exposure.

Leaves

Leaf blades much paler and slightly glaucous on the underside. Leaf blades about 8-20 x 4-10 cm, petioles about 0.5-1.5 cm long. Stipules about 8-20 mm long, attached to the base of the petiole on young leaves but soon withering and shed. Twigs, and in particular the twig bark, aromatic when cut or broken. Usually 5 or 6 major veins (including the midrib) arise near the base of the leaf blade and radiate upwards. In addition one major vein departs from the midrib at a low angle about 1 cm from the base of the leaf blade. Oil dots visible with a lens in the body of the leaf blade and also along the veins where they are often particularly obvious. Base of the leaf blade auriculate on one side of the petiole but not on the other. 'Oak grain' in the twigs.

Flowers

Inflorescence about 9-13 cm long on a peduncle about 2-4 cm long. Spikes mainly composed of closely packed peltate bracts. Female flowers: Ovary about 1 mm high, subtended by a basal, peltate bract about 0.8-1 mm diam. Ovary unilocular. Style absent. Stigma 3-lobed, clothed in short, bristle-like appendages. Ovule 1.

Fruit

Infructescence about 14-15 cm long on a stalk about 3-4 cm long. Individual fruits about 2.5 x 1.5 mm, closely packed together in dense finger-like spikes. Seeds ellipsoidal, about 2 mm long. Embryo apical, small and inconspicuous.

Seedlings

Cotyledons +/- orbicular, about 5-6 x 4-7 mm, apex mucronate. First leaves cordate, underside clothed in hairs, upper surface sparsely clothed or almost glabrous. Internode lengths very short so that the cotyledons and first leaves are almost in a whorl. At the tenth leaf stage: leaf blade cordate, apex acute, base auriculate to cordate. Venation palmate, lateral veins 2 or 3 on each side of the midrib, midrib raised on the upper surface. Hairs present on the midrib and veins on the underside of the leaf blade and the midrib on the upper surface. Stipules hairy, caducous, about 8 mm long, enclosing the terminal bud, attached to the petiole and stem, leaving a scar when shed. Upper surface of each petiole marked with an elongated triangular scar. Oil dots small, more obvious close to the margin of the leaf blade. Adventitious roots usually present, leaf-opposed, emitting a spicy odour when crushed. Hairs on the stems and petioles arranged in discrete longitudinal lines. Seed germination time 41 to 67 days.

Distribution and Ecology

Occurs in NT, CYP and NEQ. Altitudinal range from near sea level to 800 m. Grows in well developed lowland and upland rain forest. Also occurs in New Guinea and other parts of Malesia & Asia.

Natural History & Notes

Not often cultivated but has potential because of the unique leaves and the slender red fruits.

Synonyms

Piper rothiana* F.M.Bailey**, *Queensland Agricultural Journal* 5(4): 390(1899), Type: Queensland, Atherton, J.F. Bailey. Holo: BRI. ***Piper rothiana* F.M.Bailey var. *rothiana, *Bibliotheca Botanica* 89(4): 558(1928). ***Piper rothiana* var. *gracilescens* Domin**, *Bibliotheca Botanica* 89(4): 558(1921), Type: Queensland, Russell River, Ja. 1910, K. Domin. Holo: PR.

RFK Code

2200



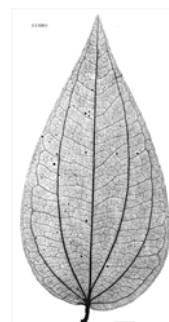
Leaves and fruits. © CSIRO



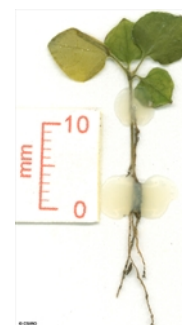
Fruit. © W. T. Cooper



Flowers [not vouchered]. © G. Sankowsky



Scale bar 10mm. © CSIRO



Cotyledon stage, epigeal germination. © CSIRO



10th leaf stage. © CSIRO



Vine stem bark and vine stem transverse section. © CSIRO



Vine stem bark and vine stem transverse section. © CSIRO

