

AUSTRALIAN BIOLOGICAL RESOURCES STUDY



FLOODPLAIN FLORA

A flora of the coastal floodplains
of the Northern Territory, Australia

I. D. Cowie, P. S. Short & M. Osterkamp Madsen

Parks & Wildlife Commission of the Northern Territory



FLORA OF AUSTRALIA SUPPLEMENTARY SERIES NUMBER 10

Extract: Molluginaceae

MOLLUGINACEAE

Herbs or sometimes small shrubs, occasionally succulent. *Leaves* opposite or whorled or alternate, simple, entire; stipules present or absent. *Flowers* usually small and inconspicuous, usually bisexual, actinomorphic, solitary in the axils or in cymose inflorescences. *Perianth* segments (4) 5, persistent, free or sometimes connate at the base, imbricate. *Petals* absent. *Staminodes* absent or present and petaloid, small and usually free. *Stamens* (2) 5–10 (or

MOLLUGINACEAE

more); filaments distinct or basally connate; anthers tetrasporangiate and dithecal, opening by longitudinal slits. *Gynoecium* usually of 2–5 carpels united to form a compound, superior ovary, multilocular below but divisions not extending throughout; ovules 1–many in each locule; placentation axile; styles usually as many as locules. *Fruit* dry, usually a capsule, indehiscent or opening loculicidally or by transverse slits. *Seeds* sometimes arillate; embryo curved around a starchy perisperm; true endosperm absent.

A family of *c.* 13 genera and 100 species, most of which occur in subtropical and tropical regions. Three genera and eight species in NT, with the genus *Glinus* on floodplains.

The family is often included in the Aizoaceae.

GLINUS L.

Annual or perennial *herbs*. *Leaves* in a rosette at the base; cauline leaves opposite or spuriously whorled, all leaves entire or obscurely dentate, petiolate; stipules small and falling. *Flowers* axillary, clustered, pedicellate or subsessile. *Perianth* segments (tepals) 5, herbaceous but with scarious and often white margins, often of unequal length, free. *Petals* absent. *Staminodes* usually present, external to stamens and fewer in number, petaloid, subulate or bifid. *Stamens* 3–20, free or fascicled; filaments filiform. *Ovary* with 3, 4 or 5 locules. *Styles* 3, 4 or 5, erect, spreading or recurved, persistent. *Fruit* a 3-, 4- or 5-valved membranous capsule, opening loculicidally. *Seeds* arillate; aril white with a curved filiform appendage.

A genus of perhaps 12 species in subtropical and tropical countries.

Taxonomic reference: Backer (1951).

Young branchlets with dense indumentum of stellate hairs **G. lotoides**

Young branchlets glabrous or with simple hairs **G. oppositifolius**

G. lotoides L.

Annual or perennial *herbs* with stem and branches prostrate to ascending, to 10–40 cm long, with conspicuous indumentum of stellate hairs; taproot well-developed. *Cauline leaves* barely petiolate or with stellate-hairy petioles to *c.* 1 cm long; lamina mostly very widely obovate to obovate, 0.8–2.3 cm long, 0.7–1.4 cm wide; margins entire, both surfaces greyish green and with a moderate to dense indumentum of stellate hairs. *Flowers c.* 3–8 in axillary clusters, more or less sessile or on stellate-hairy pedicels to *c.* 5 mm long. *Perianth* segments 6–7 mm long, externally stellate-hairy but internally glabrous, 1 or 2 segments thin and entirely herbaceous, remaining segments with scarious margins. *Stamens c.* 10–15, some staminodes also present. *Ovary* glabrous. *Styles* 5, 1–1.5 mm long. *Capsule* 4.5–6 mm long, 5-valved, 4–6 mm long, enclosed within the perianth. *Seeds* subreniform, *c.* 0.4 mm long, shiny reddish brown, with lines of tubercles. *Flowering & fruiting:* all months. Fig. 13 (Cowie 3263).

Southern Europe, Africa, southern and SE Asia, Australia (all mainland States) and America. Widespread throughout NT in an array of habitats, particularly along water courses and around waterholes and in the north on black soil plains.

G. oppositifolius (L.) A.DC.

Annual *herbs* with stem and branches usually prostrate, to *c.* 50 cm long, glabrous or with simple, white, curled hairs especially on young growth; taproot well-developed. *Cauline leaves* not or barely petiolate but tapering gradually to the base, elliptic, ovate or obovate, 1–3.5 cm long, 0.4–1.3 cm wide; margins entire or obscurely dentate, glabrous or with curled simple hairs. *Flowers c.* 3–10 in axillary clusters, on pedicels 2–7 mm long. *Perianth* segments 3–4.5 mm long, greenish except for scarious margins, glabrous. *Stamens* 3–5. *Ovary* glabrous. *Styles* 3 or 4, less than 0.5 mm long. *Capsule* 2.5–3.5 mm long,

3- or 4-valved, enclosed within the perianth. *Seeds* subreniform, c. 0.5 mm long, shiny reddish brown, with lines of tubercles. *Flowering & fruiting*: all months. Figs 3, 13.

Europe (?), Africa, Asia and Australia (all mainland States). Widespread in NT in a variety of habitats, e.g. coastal *Melaleuca* swamps, depressions in *Eucalyptus* woodland, dry river beds and floodplains.

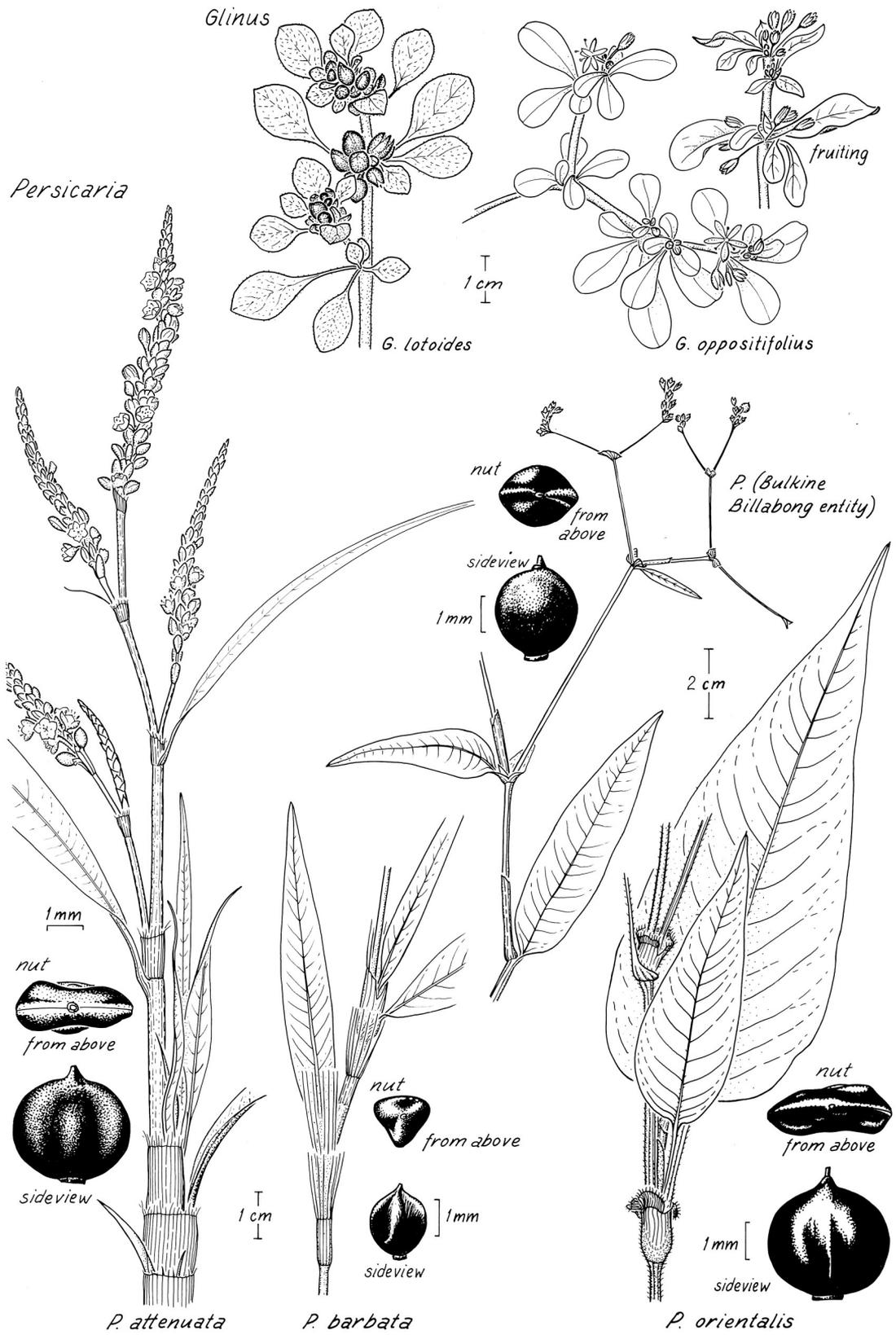


FIGURE 13