

Flora of the Darwin Region

VOLUME 1

P.S. Short & I.D. Cowie (eds)



PRIMULACEAE

P.S. Short

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PRIMULACEAE

P.S. Short

Annual or perennial *herbs*. *Leaves* alternate, opposite, or whorled, mostly simple, entire; stipules absent. *Flowers* bisexual, actinomorphic, solitary or in heads, panicles, racemes or umbels, and each subtended by 1 or more bracts. *Perianth* usually of 2 whorls, rarely petals absent. *Calyx* shortly or deeply (3-) 5- (9) -lobed. *Corolla* with (3) 5 (9) imbricate lobes, the lobes shorter to longer than the tube. *Stamens* as many as and opposite the corolla lobes; anthers introrse, tetrasporangiate and dithecal, opening by longitudinal slits or more rarely by terminal pores; staminodes absent or present. *Gynoecium* mostly of 5 carpels united to form a superior or half-inferior, compound, unilocular ovary but sometimes vestigial partitions present, the ovary usually with many ovules on free-central placentas; style solitary and commonly with a capitate stigma. *Fruit* a capsule, dehiscent by valves or more rarely circumscissile. *Seeds* with copious endosperm.

Following Cronquist (1981) the Primulaceae comprise *c.* 30 genera and 1,000 species, with most species in temperate and cool regions of the northern hemisphere, and only four genera and about ten species in Australia. Only represented in the N.T. by *Samolus ermaeus* S.W.L. Jacobs which occurs in southern arid regions, and *Lysimachia ovalis* (Ruíz & Pav.) U. Manns & Anderb. which is found in the Top End.

In the classification outlined by Mabberley (2008) the family is now enlarged to include the Myrsinaceae and Theophrastaceae.

Taxonomic references: Cronquist (1981); Ståhl (2004); Mabberley (2008).

LYSIMACHIA L.

Annual or perennial *herbs*, rarely shrubs (not N.T.). *Leaves* alternate, opposite or sometimes whorled, entire. *Flowers* solitary in axils of upper leaves, sessile or pedicellate and in panicles or racemes, sometimes head-like (not N.T.), sometimes on curved pedicels. *Calyx* deeply lobed; lobes (3) 5 (6 or 9). *Corolla* white, yellow, pink, blue or greenish, rotate or campanulate, deeply lobed; lobes (3) 5 (6 or 9), longer or shorter than calyx; contorted in bud. *Stamens* with filaments free or connate and somewhat adnate to the corolla tube, often hairy; anthers basifixed, dorsifixed or versatile, opening by apical pores or longitudinally. *Capsule* subglobose, circumscissile (as with *L. ovalis*) or opening with united valves or the valves falling apart or rarely disintegrating or indehiscent. *Seeds* 1–many, smooth or not.

Genus of *c.* 150 mostly temperate, northern hemisphere species, its circumscription recently expanded to include *Anagallis* L. and several smaller genera. Four species in Australia.

Lysimachia arvensis (L.) U.Manns & Anderb. (syn. *Anagallis arvensis* L.) has been recorded for the N.T. but is not considered naturalised, the only herbarium record being of a single collection gathered in Alice Springs in 1962.

Taxonomic references: Taylor (1958); Wheeler (1992); Manns & Anderberg (2005, 2007, 2009).

L. ovalis (Ruíz & Pav.) U. Manns & Anderb.*Anagallis pumila* Sw., *nom. illeg.*

Weakly erect to sprawling, annual *herbs*, *c.* 5–25 cm tall, stems angular and often slightly winged, usually green but sometimes reddish. *Leaves* may be opposite at the base, otherwise subopposite to manifestly alternate, sessile, narrowly to widely elliptic or ovate to widely ovate, (2) 5–8.5 mm long, (1.5) 3–6 mm wide. *Flowers* solitary and axillary. *Pedicels* 2–10 mm long. *Calyx segments* (4) 5, almost free, narrowly triangular, 1.5–2.5 mm long. *Corolla* about the length of the calyx; lobes (4) 5, narrowly triangular, the apex acuminate, white. *Staminal filaments* glabrous. *Capsule* globose, circumscissile, *c.* 1.5 mm diam. *Seeds* 3-angled, *c.* 0.4 mm long, brown, minutely papillate. *Flowering & fruiting: c.* May–Sept.

Fig. 1 (Michell 2501).

Pantropical (Australia: W.A., N.T., Qld). Known in the N.T. from a few collections gathered in the Top End (including Kakadu and Nitmiluk national parks) and a specimen from Wollogorang Station. In the D.R. it is known from the Mary River region and near Hayes Creek. Grows in shaded seepage areas in sandstone country, on the margins of swamps, and on the banks of drainage lines. Mostly in sand or sandy loam but sometimes in clayey soils.

Lysimachia ovalis

Fig. 1

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