

AUSTRALIAN BIOLOGICAL RESOURCES STUDY



# FLOODPLAIN FLORA

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

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*Extract: Apiaceae*

## APIACEAE

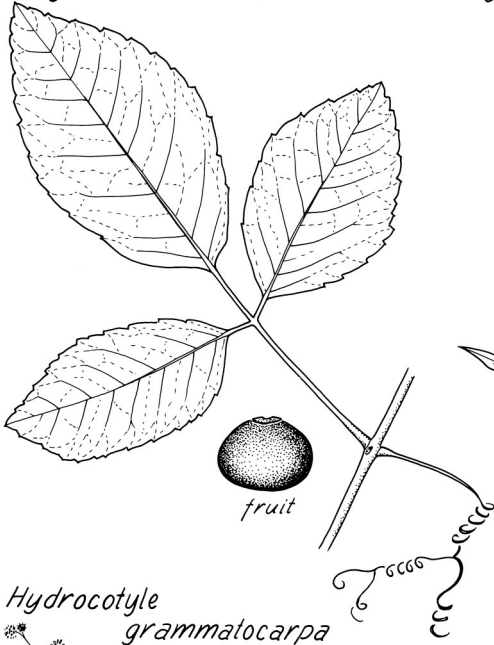
Annual or perennial *herbs*, sometimes shrubs or rarely soft-wooded trees. *Leaves* usually alternate, sometimes opposite; stipules absent or more rarely present (as in *Hydrocotyle*); lamina simple or more commonly dissected and often compound; petioles usually with a sheathing base. *Flowers* bisexual or unisexual, small and usually in a compound umbel or in a solitary umbel, head or short spike; all flowers epigynous, 5-merous. *Calyx* absent or sepals minute. *Corolla* of valvate or slightly imbricate petals, usually white, pink or yellow. *Stamens* 5, alternating with the petals; anthers tetrasporangiate, opening by longitudinal slits. *Gynoecium* of 2 carpels united to form an inferior, bilocular ovary; ovules solitary in each locule; styles 2, distinct, swollen at the base and forming a stylopodium that is confluent with a nectariferous disc at the base of which the perianth and stamens are inserted. *Fruit* a schizocarp, remaining entire or splitting at maturity into 2, 1-seeded, indehiscent mericarps which are united by a central axis or carpophore, sometimes one of the mericarps not developing. *Mericarps* usually with 5 longitudinal primary ribs, sometimes with secondary ribs; vittae (resin tubes) present or absent. *Seeds* with copious, oily endosperm; embryo minute.

A cosmopolitan family, with the alternative name Umbelliferae, of about 300 genera and 3,000 species. Most diverse in temperate regions. About 36 genera and 170 species in Australia.

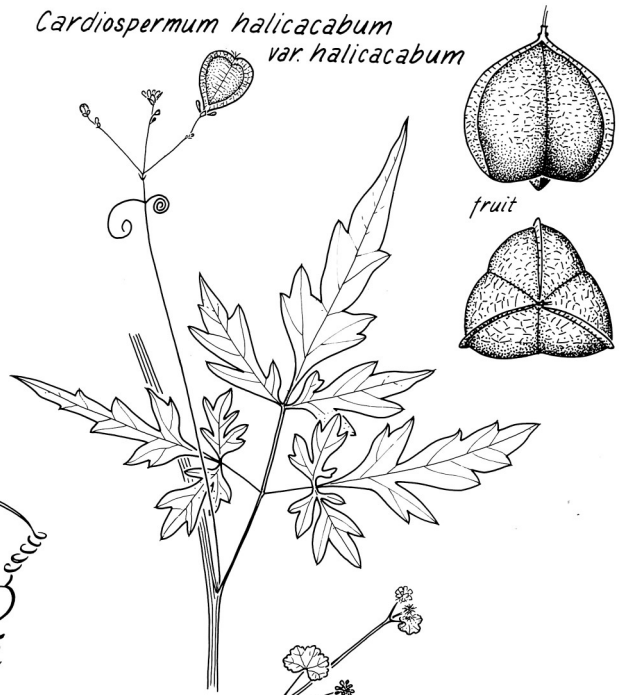
Petioles with sheathing bases; stipules absent; mericarps with connecting veins between the ribs ..... **Centella**

Petioles lacking sheathing bases; stipules present; mericarps without veins between the ribs ..... **Hydrocotyle**

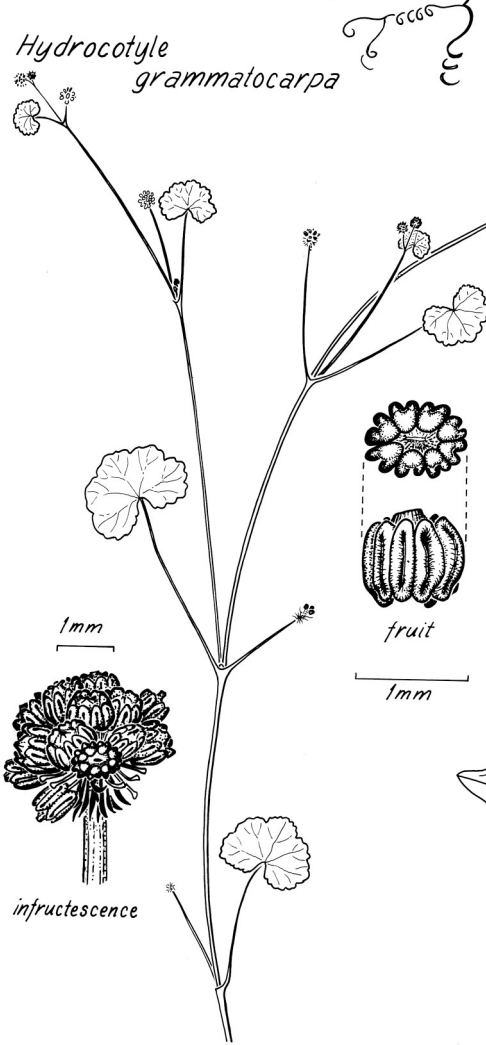
*Cayratia maritima*



*Cardiospermum halicacabum*  
var. *halicacabum*



*Hydrocotyle*  
*grammatocarpa*



all illustrations  
unless otherwise indicated } 1cm

*Physalis minima*



FIGURE 23

## APIACEAE

### CENTELLA L.

Perennial creeping *herbs*, rooting at nodes. *Leaves* with sheathing petioles; stipules absent. *Flowers* bisexual, in simple umbels; involucre bracts present. *Calyx* absent. *Corolla* with the petals entire, imbricate. *Schizocarp* laterally compressed, splitting into component mericarps. *Mericarps* curved and swollen, with narrow ribs connected by veins; vittae absent.

About 20–40 species worldwide, but mostly in the Southern Hemisphere and with two or three species in Australia. Only one in NT.

#### **C. asiatica** (L.) Urb.

Perennial creeping *herbs*, with the dark red-brown stems glabrous or with short, white cottony hairs. *Leaves* mostly in rosettes of 2–6, sometimes single; petioles 1–6 cm long, mostly glabrous or almost so, sometimes densely hairy; margins of the sheathing bases somewhat membranous; lamina roundly reniform, c. 1.5–4.5 cm across; margins manifestly crenate; surfaces of young leaves hairy but becoming glabrous. *Umbels* 2–4-flowered, solitary or several together in the axils of small bracts; peduncles 2–4 mm long, with the entire umbel much shorter than the leaves. *Petals* reddish. *Mericarps* c. 2.5–3 mm long. c. 1.5 mm wide, reddish and with scattered hairs, with 6–9 very narrow ribs. *Flowering & fruiting*: c. Sept.

Pantropical (Australia: NT, Qld, NSW). Only known in NT from a single collection (*Short 4844*) near Gatji (Arafura Swamp region). Plants grow in clay soil and were found mostly under *Melaleuca cajuputi* bordering a stream and extending to the edge of a seasonal swamp.

### HYDROCOTYLE L.

Annual or perennial, often stoloniferous *herbs*; stems and branches prostrate or ascending. *Leaves* petiolate; petioles lacking sheathing bases; stipules present. *Flowers* bisexual, in umbels; involucre bracts small or absent. *Calyx* absent or sepals minute. *Corolla* with the petals entire and usually with acute, non-inflexed apices; entire petal commonly white or cream, but sometimes with purplish tinting. *Schizocarp* laterally compressed, somewhat woody, and not splitting into component mericarps; carpophore absent or remaining undivided and persistent. *Mericarps* with corky ribs not connected by veins; vittae absent.

Over 130 species worldwide, mainly in the tropics and southern temperate zones. About 60 species in Australia, but only four in NT.

#### **H. grammatocarpa** F.Muell.

Annual or short-lived perennial, prostrate *herbs* that root at the nodes, mainly glabrous but scattered, simple hairs sometimes observed. *Leaves* simple, glabrous; blade circular or depressed-ovate in outline, (4) 5–19 mm long, (4) 7–30 mm wide, with (3) 5 major but shallow segments and basally cordate; each major segment shallowly lobed; stipules lanceolate, membranous, fimbriate. *Umbels* usually simple, pedunculate. *Flowers* c. 10–20 per umbel. *Petals* white or purplish, c. 0.2 mm long. *Schizocarps* c. 0.8 mm long, 0.8–1 mm wide, pale brown. *Mericarps* with 4 longitudinally and conspicuously grooved but otherwise smooth ribs. *Flowering* c. June. *Fruiting*: July–Sept. Fig. 23 (*Dunlop 4981*; *Henshall 355*).

Australia (WA, NT, Qld). Uncommon in NT but widespread from Kakadu NP to Nicholson River. Grows mostly in sandy soil along creeks and on the edges of billabongs and swamps.