

Centella asiatica (L.) Urb.

Standardized Common Name: Gotu Kola

Other Common Names: Asiatic Pennywort, Hydrocotyle, Indian Pennywort, Marsh Pepperwort, Water Pennywort

Family: Apiaceae (Umbelliferae)

Parts in Commerce: Vegetative portions

Identification:

- Stems thin, trailing, reddish
- Roots and clustered leaves arising from each stem node
- Roots straight, whitish, to several cm long, rarely branching
- Petioles long, thin, grooved; sometimes hairy, especially in North American material, with pubescence varying within individuals
- Petiole bases widened and sheathing; separate stipules not present
- Leaf blade reniform, orbicular, or ovate, 1.5–6(–10) cm long, with cordate to truncate base and obtuse to rounded apex
- Leaf margins crenate or shallowly lobed to shallowly dentate or nearly entire near apex
- Leaves fleshy, hairless or bearing some long, unbranched hairs
- Venation palmate, more or less dichotomously branching, occasionally reticulating in outer portion of leaf; often faint on upper surface
- Odor aromatic
- Taste spicy, slightly bitter and sweetish

Adulterants: Most species of *Centella*, outside the *C. asiatica* complex, are of limited distribution and not liable to be found in commerce. *C. asiatica* could potentially be confused with species of the closely related genus *Hydrocotyle*, which can be distinguished by its vegetative features:

- Leaves peltate in some species
- Leaves usually one per node rather than clustered
- Separate stipules visible below the petioles
- Petiole bases not sheathing

Both *C. asiatica* and the completely unrelated *Bacopa monnieri* (L.) Pennell (Bacopa) are called Brahmi in Ayurvedic medicine, and the two might be confused as a result. *Bacopa monnieri* is also a fleshy creeping herb, but the leaves are narrowly elliptical to oblong with mostly entire margins and nearly invisible venation.

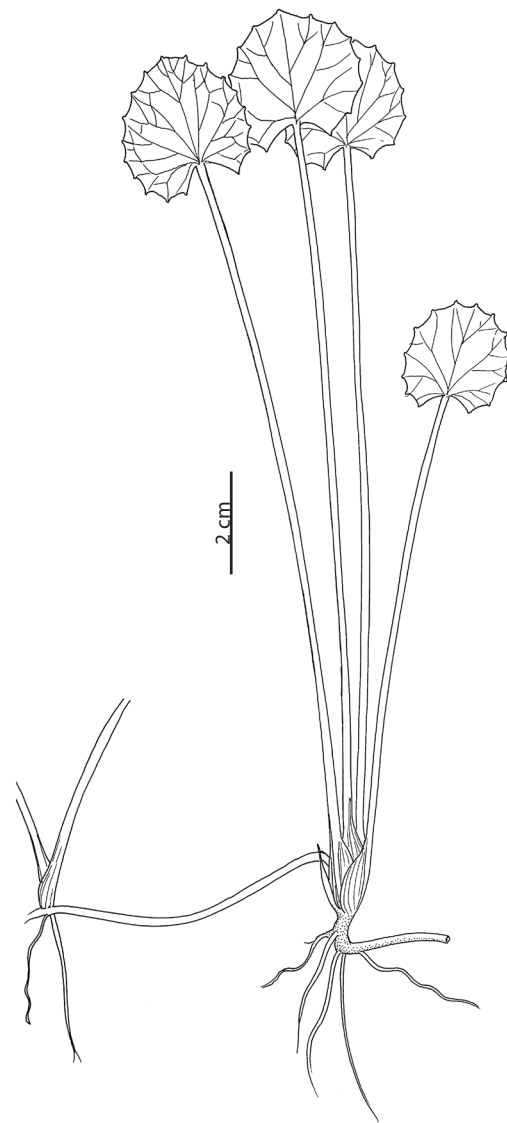


Figure 17: *Centella asiatica*.

Description: Perennial creeping herb. Stolons or rhizomes slender, rooting at nodes, often reddish. Leaves clustered, usually 2–5 per node or rarely single, without stipules; petioles thin, erect, 2–15(–30) cm long, broadened and sheathing at base, grooved, glabrous or pubescent, often reddish. Leaves reniform to orbicular or ovate, 1.5–6(–10) cm long, 1.5–6(–8) cm broad, fleshy; margins crenate or shallowly lobed to shallowly dentate or entire; base deeply cordate to truncate; apex obtuse or rounded; blade glabrous or softly pubescent. Inflorescence a simple umbel, (1–)3–9-flowered, subtended by 2 ovate bracts; peduncle <1–4(–10) cm long, filiform, pubescent; pedicels very short or absent. Flowers minute; petals 5, to 1 mm long, white or reddish, deciduous; stamens 5; ovary 2-carpellate. Fruit 2 mericarps, orbicular to ellipsoid, 1.5–4 mm long, 2–4(–5) mm broad, laterally flattened, with 7–9 reticulated ribs.

Taxonomy: *Centella* includes about 40 species, most of which are restricted to South Africa. *Centella asiatica* is widely distributed in warm damp habitats. The basionym is *Hydrocotyle asiatica* L.; several obsolete synonyms exist. Populations native to North America are segregated by some authors as *C. erecta* (L. f.) Fernald.

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