

***HYDROCOTYLE VERTICILLATA* THUNB. (APIACEAE) -  
A NEW ANGIOSPERMIC RECORD FOR BANGLADESH**

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The genus *Hydrocotyle* L. belongs to the family Apiaceae consists of about 100 species distributed throughout temperate and tropical region of the world (Airy-Shaw, 1897). In the Indian subcontinent Clarke (1879) reported 5 species of *Hydrocotyle* from the British India, namely, *H. javanica* Thunb., *H. burmanica* Kurz, *H. conferta* Wight, *H. rotundifolia* Roxb. and *H. asiatica* L. Prain (1903) documented only 2 species of *Hydrocotyle* viz. *H. rotundifolia* Roxb. and *H. asiatica* L. from the then Bengal. This genus is represented by a single species *Hydrocotyle sibthorpioides* Lam. (*H. rotundifolia* Roxb.) in Bangladesh (Rahman, 2008).

Recently a specimen of the genus *Hydrocotyle* was collected from Azimpur of Dhaka city. After critical study, it has been identified as *Hydrocotyle verticillata* Thunb. with the help of Britton and Brown (1913). *Hydrocotyle verticillata* is distinguished from *H. sibthorpioides* Lam. by having verticillate inflorescence, larger leaflets and longer petiole. *Hydrocotyle verticillata* Thunb. was not reported earlier from the areas that now falls under the present territory of Bangladesh by the workers of this region, viz. Clarke (1879), Prain (1903), Heinig (1925), Cowan (1926), Raizada (1941), Datta and Mitra (1953), Sinclair (1956), Khan and Afza (1968), Khan and Banu (1972), Khan and Hassan (1984), Khan *et al.* (1994), Mia and Khan (1995), Rahman and Hassan (1995), Uddin *et al.* (1998), Uddin and Rahman (1999), Khan and Huq (2001), Rahman *et al.* (2001), Rashid and Mia (2001), Uddin *et al.* (2003), Rahman (2004a, b), Hossain *et al.* (2005), Alam *et al.* (2006) and Islam *et al.* (2009). Hence, it is being reported here as a new record for Bangladesh.

A detailed taxonomic account along with illustration of the plant has been made based on the fresh materials. The collected specimen has been preserved in the Bangladesh National Herbarium, Dhaka (DACB).

***Hydrocotyle verticillata* Thunb.**, Diss. *Hydrocotyle* 2: t. 5 (1778). Britton & Brown, An Illustrated Flora of the Northern United States, Canada and the British Possession 2: 649 (1913). *Hydrocotyle vulgaris* Thunb., Flora of Capensis: 252 (1782). **(Plate 1)**

A perennial, glabrous, succulent, prostrate herb, 10-15 cm long. Stem creeping, rooting at the nodes, with long stolon. Leaves simple, alternate, leaflets c. 2.0-5.0 x 2.5-6.0 cm, orbicular-reniform, rather broader than long, palmately lobed, margin very

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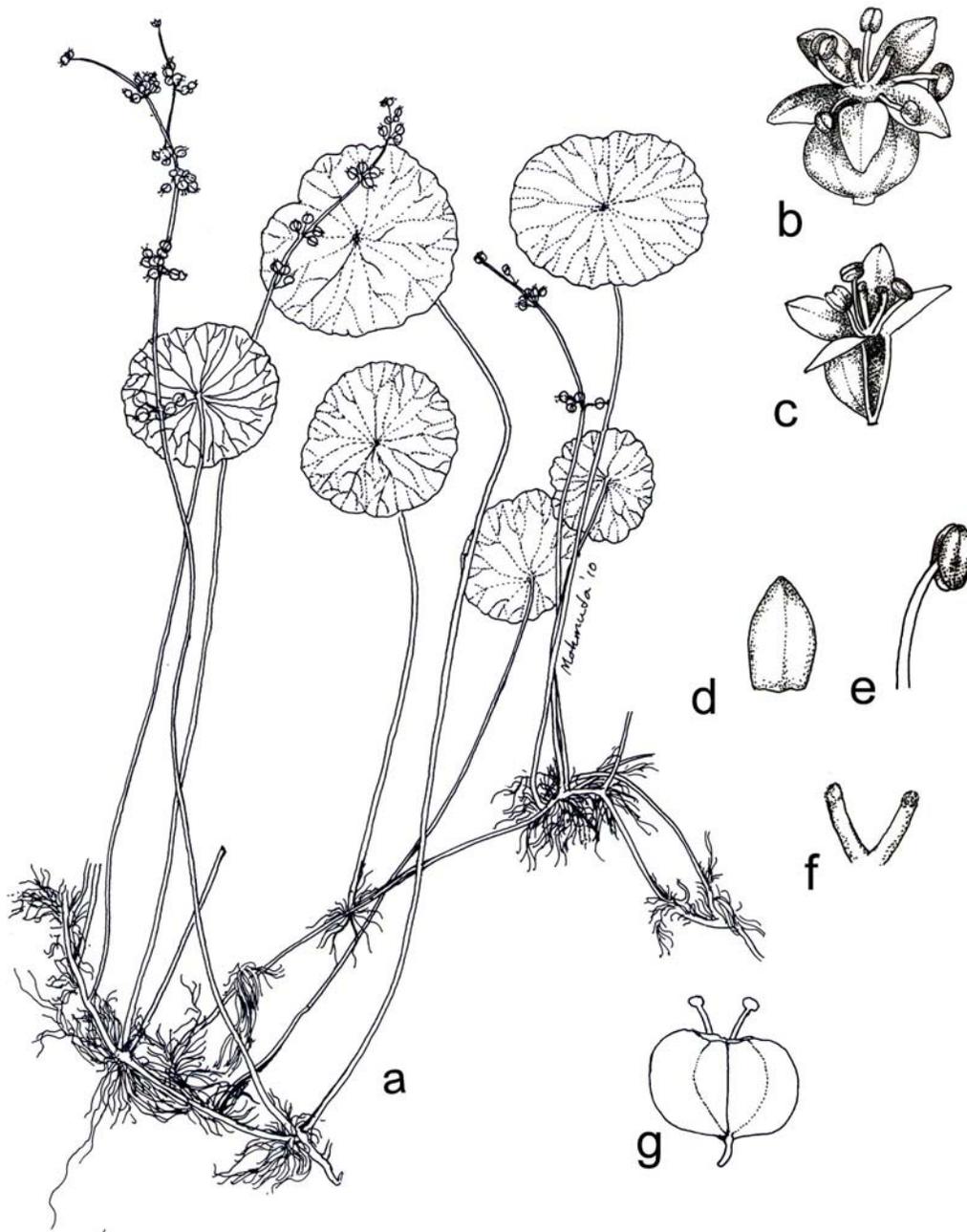


Plate 1. *Hydrocotyle verticillata* Thunb. (a) Habit sketch (x1); (b) a flower (x25); (c) L.S. of a flower (x25); (d) a corolla (x20); (e) stamen (x25); (f) a stigma (x25); (g) a fruit (x20).

coarsely repand-serrate, shiny, blackish-green above, pale beneath, smooth, prominently veined; petiole c. 8-25 cm long. Inflorescence c. 5-25 cm long, arising from the axil of the leaves; peduncle 3-13 cm long with at least 2-6 verticillate flowers clustered at 1-3 cm apart, each cluster consisting 6-12 flowers. Flowers greenish to creamy-white, star-shaped, small; pedicel very short, 2-3 mm long in fruit; perianth 5, c.  $1.5 \times 1.0$  mm, ovate-acute, each flower subtended by a minute bract at the base. Stamens usually 5. Ovary orbicular, glabrous; style filiform, divergiccate. Fruits sub-orbicular,  $1.0-1.5 \times 2.0-2.5$  mm, broader than long, laterally compressed with prominent ribs.

*Flowering and Fruiting:* November - January, also between March - May.

*Specimen examined:* **Dhaka:** Azimpur residential area, 10.11.2007, B.M. Rezia Khatun, RK 5702 (DACB).

*Ecology:* Grows in moist and waste places, by the side of drains of sewerage line and in shady moist soil.

*Economic value:* Used as background in aquarium, garden pond, sometimes used as indoor plant in America.

*Distribution:* Native of North and South America, distributed in Canada, Denmark, France, Puerto Rico and Hawaii.

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