

Heteranthera reniformis (Pontederiaceae): A new addition to the Asian continent from India

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Abstract: *Heteranthera reniformis* (Pontederiaceae) is recently collected from the Vyentakapur village, Sironcha taluka, Gadchiroli district, Maharashtra. It is reported here as a new record for the continent of Asia. A comprehensive taxonomic account is provided with description, photographs and distribution to facilitate easy identification of the species in the field.

Keywords: *Heteranthera reniformis*, new addition, India, Asia.

Introduction

The genus *Heteranthera* Ruiz & Pav. (mud plantain) has been historically recognized within the aquatic monocot family Pontederiaceae as having six perianth lobes, three dimorphic stamens and a many-seeded capsule (Horn, 2002). At the specific level, several new species of *Heteranthera* have been recently recognized in Brazil. Two species, *H. catharinensis* C.N. Horn & M.Pell. and *H. pumila* M.Pell. & C.N.Horn have been described from southern Brazil as segregates from *H. reniformis* Ruiz & Pav. (Pellegrini & Horn, 2017). Subsequently, *Heteranthera longirachilla* D.J.Sousa & Giul. has been described and is known from northeastern Brazil (Sousa *et al.*, 2018). With these additions, the genus *Heteranthera* comprises 20 accepted species (POWO, 2025). During exploration of the wetland flora of eastern Maharashtra, an excursion was conducted in the district Gadchiroli in

Vidarbha region that led to the collection of some interesting individuals belonging to the family Pontederiaceae. Based on the critical examination of the specimens by referring to pertinent taxonomic literature (Hooker, 1883; Gamble, 1936; Cooke, 1996; Uniyal *et al.*, 1999; Sujana & Sivaperuman, 2008; Panda *et al.*, 2011; Swapna *et al.*, 2011; Misra *et al.*, 2012; Chowdhury & Das, 2013, 2015; Jadhav, 2016; Sharma, 2018, 2022), the specimens were identified as *Heteranthera reniformis* Ruiz & Pav. that is reported from North America (POWO, 2025). A taxonomic description of the plant along with a photo plate is provided. The voucher specimens have been deposited in BSI and SUK herbarium.

***Heteranthera reniformis* Ruiz & Pav., Fl. Peruv. 1: 43. 1798.**

Fig. 1

Annual and marshy herbs, rooted in mud. Roots thin, delicate, unbranched, white. Stems of two types vegetative and flowering; vegetative stems submerged with elongated internode or emerged and procumbent, floating in shallow water, delicate, spongy, rooting at the nodes. Flowering stem glabrous, 7–15 cm long, containing a single leaf and inflorescence. Leaves of two types, sessile and petiolate; sessile leaves forming basal rosette, blade linear to oblanceolate, thin; petiolate leaves alternate, floating or immersed; sheaths 2–3.7 cm long, glabrous, covered with mucilage, longitudinally split; petiole 4–12 cm long, glabrous;

Received: 29.08.2025; Revised & Accepted: 04.12.2025

Published Online: 31.12.2025

blades reniform, cordate, 1.3–4 × 1.5–5 cm, simple, entire, obtuse to acuminate at apex; stipules 1–2 cm long, apex obtuse. Inflorescence spike, spicate, 2–8-flowered, usually shorter than spathe apex; spike not elongating out of spathe but terminal flower may extend past the apex of the spathe;

spathe 1–4 cm long, glabrous, subtending spathe bract-like; peduncle 1–3 cm long, glabrous. Flower bisexual; perianth white, salveriform; tube 5–10 mm long, glandular pubescent, zygomorphic, lobes narrowly elliptic. Stamens 3, dimorphic, unequal, fused to the perianth tube at adjacent wings; lateral

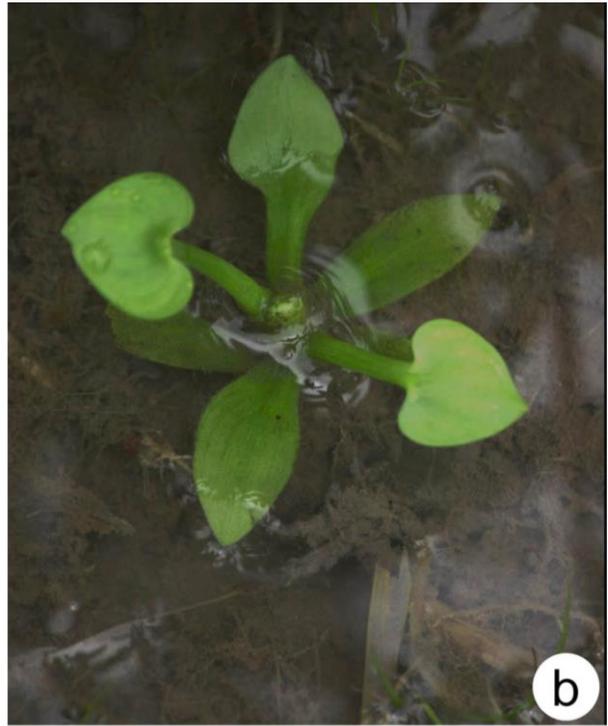
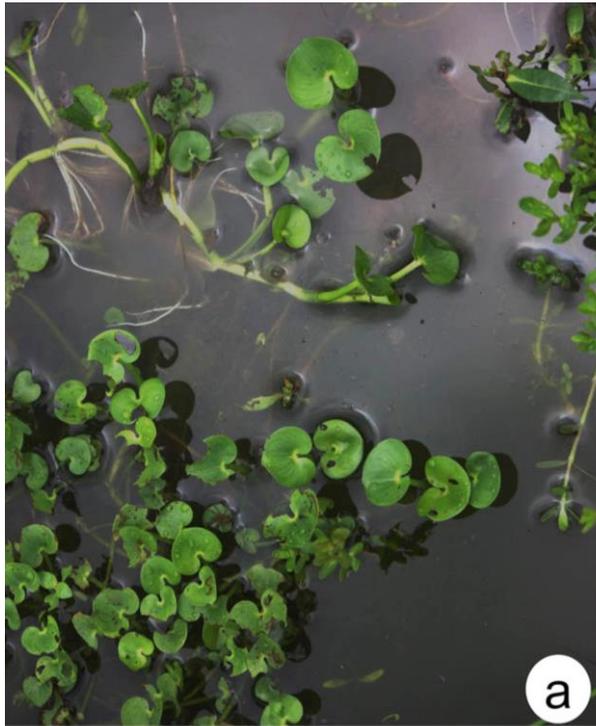


Fig. 1. *Heteranthera reniformis* Ruiz & Pav.: **a.** Habitat; **b.** Young plant with sessile and petiolate leaves; **c.** Leaf; **d.** Inflorescence.

stamens with linear filaments, pubescent with white multicellular hairs towards apex; central stamen filament sparsely villose, multicellular hairs white. Style pubescent with multicellular hair; stigma densely glandular pubescent. Fruit a capsule, not seen. Seeds not seen.

Flowering & Fruiting: September to December.

Habitat: Growing in ditches of a perennial stream in Vyankatapur, Gadchiroli district, Maharashtra.

Distribution: The native range of this species is Central and Eastern U.S.A. to tropical and subtropical America. It has been naturalized in Bulgaria, Greece, Hawaii, Italy, Portugal, Spain (POWO, 2025) and now in India.

Specimen examined: INDIA, Maharashtra, Gadchiroli district, near perennial stream of Vyankatapur, N 19°11'14" E 79°57'00", 133 m, 24.11.2024, Kahalkar 506 (BSI, SUK).

Acknowledgements

The authors are thankful to the Principal of the Mahatma Gandhi Arts, Science & Late N. P. Commerce College, Armori, for providing laboratory facilities. They are grateful to Prof. Charles N. Horn, South Carolina, U.S.A. for confirmation of the identity of the specimen and for providing literature. Thanks are also due to Maharashtra Forest Department for permission to conduct the study. The authors also wish to thank Dr. Vinod B. Shimpale, New College, Kolhapur for his assistance in the preparation of the photo plate.

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