

## Reconfirmation of the identity and occurrence of *Phyllanthus ajmerianus* Chaudhary & Rao in Ajmer, Rajasthan, India

Chaudhary & Rao<sup>1</sup> in a revision of the herbaceous species of *Phyllanthus* in India described a new species namely *Phyllanthus ajmerianus* Chaudhary & Rao based on a solitary collection of V. S. Sharma 1385 (LWG) collected from a village Naikhera, Kekri tank on 30.12.1959 in Ajmer Dist, Rajasthan. However no additional collection was seen by the founding authors nor could they recollect the fresh specimens from the type locality. Parmar<sup>2</sup> commenting on the status of this new species remarked that it is only a mistaken identity and the specimen actually belongs to another taxon namely, *Andrachne telephioides* L. The distinguishing characters between two genera being the presence or absence of petals in male flowers. Chaudhary<sup>3</sup> is of the opinion that the petal character in male flowers in *P. ajmerianus* is so minute and indistinct that this character alone cannot decide the correct status of *P. ajmerianus*.

*Andrachne telephioides* L. originally reported from Afghanistan and Westwards to Spain<sup>4</sup> was reported as a new record for India by Parmar<sup>5</sup> in 1982 and the two taxa are quite distinct and there seems to be no ground for confusion. In order to re-examine and solve the taxonomic confusion, we undertook extensive surveys not only in the type locality but in similar other habitats in and around Ajmer. While we were able to collect the so-called *P. ajmerianus*, we could not see any specimen similar to *P. ajmerianus* in the herbarium of Botanical Survey of India, Jodhpur (BSJO). A critical examination and study of our specimens reconfirmed the occurrence of *P. ajmerianus* in Ajmer, Rajasthan and this species differs distinctly from that of *A. telephioides* as follows.

Annual, branching from the base; leaves spatulate or obovate, rounded at apex, coriaceous; sepals 5, elliptic-obo-

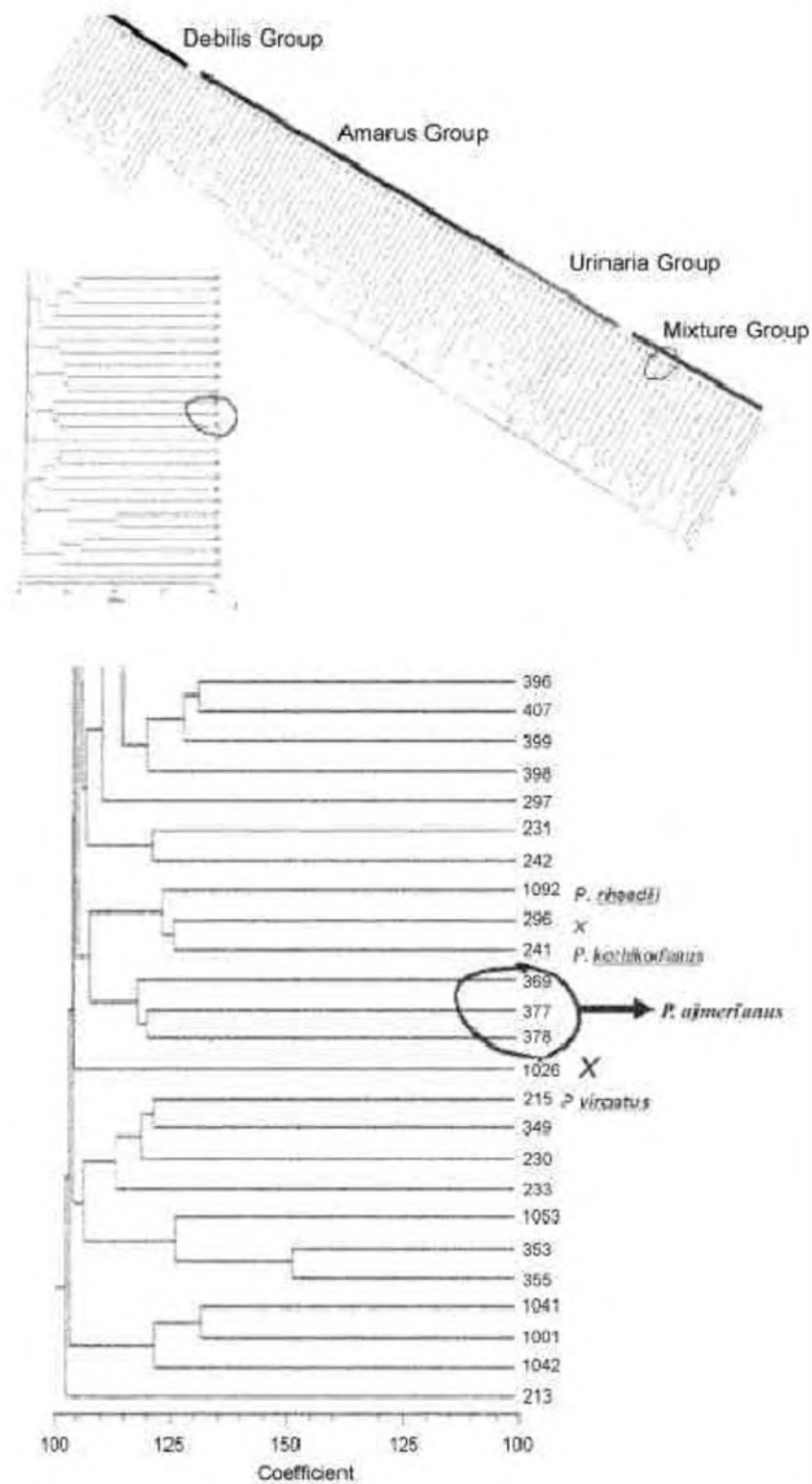
vate or oblanceolate; petals absent; stamens 5, basally connate and free above; style 2-fid, deeply bilobed; capsule obovate, obtusely trilobed; seeds trigonous with 6–7 longitudinal lines on the back.

—*Phyllanthus ajmerianus*

Perennial, with prostrate branches arising from a rootstock; leaves ovate to elliptic or obovate, acute or subacute at apex; sepals 5–6, rounded or rhombic; petals 5–6, small, lanceolate; stamens 5–6, free, alternate with petals; style feebly 2-fid, 2-partite; capsule depressed globose; seeds triquetrous, with a convex, punctulate back.

—*Andrachne telephioides*

Further, the molecular profile (AFLP analysis) of *P. ajmerianus* was compared with other herbaceous *Phyllanthus* species and this study also pointed to the distinct identity of the taxon closer to *Phyllanthus kozhikodianus* Siv. & Mani and *Phyl-*

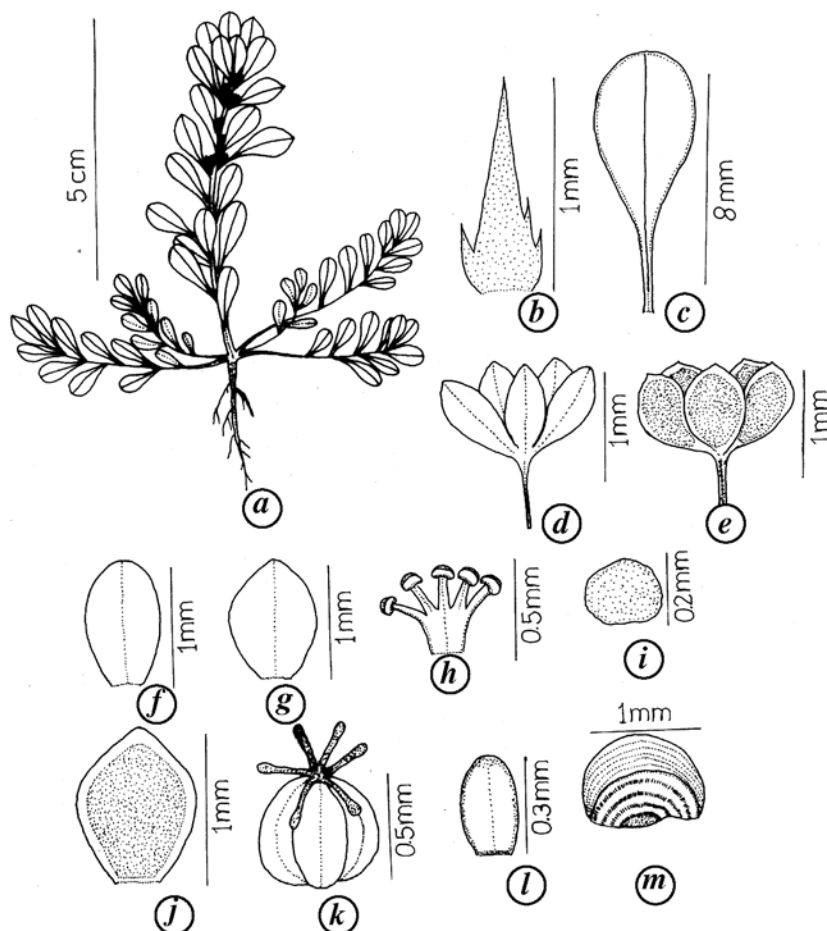


**Figure 1.** Dendrogram showing the relationship of *Phyllanthus ajmerianus* Chaudhary & Rao with *P. kozhikodanus* Siv. & Mani and *P. rheedii* Wight.

*lanthus rheedii* Wight as shown in Figure 1. A description of the species along with

illustration is given in Figure 2 for their easy identification.

*Phyllanthus ajmerianus* Chaudhary & Rao in *Phytotaxonomy* 2, 147, 2002.



**Figure 2.** *Phyllanthus ajmerianus* Chaudhary & Rao. *a*, Habit; *b*, Stipule; *c*, Leaf; *d*, Male flower; *e*, Female flower; *f*, *g*, Male calyx lobes; *h*, Stamens; *i*, Male disk segment; *j*, Female calyx lobe; *k*, Pistil; *l*, Female disk gland; *m*, Seed (R. R. Rao, Vishwanatha & T. N. Parameswaran 377).

Erect annual herbs, 2.5–8 cm long; stems many arising from the base, ascending or prostrate, slender, striate, glabrous, minutely winged towards tip. *Cataphylls* absent. *Stipules* ca. 1 mm long, membranous, linear-lanceolate with acuminate apex, entire to lacinate in basal portion, glabrous. *Leaf lamina* 2–10 × 1–4 mm, spatulate or obovate-attenuate or ovate-elliptic particularly in upper part of the stem, cuneate at base, entire along margins, acute to subobtuse at apex, glabrous, midrib slightly raised below, lateral veins not prominent. *Cymes* unisexual with solitary female flower in lower axils and 1–3 male flowers in uppermost axils. *Male flowers* minute, with ca. 1 mm long pedicel; calyx lobes 5, elliptic-obovate or rhomboid, acute at apex, margin entire to

wavy towards tip, membranous; stamens 5, filaments free above (2/3) and connate below (1/3); disk segments 5, saucer-shaped. *Female flowers* with 0.5–1 mm long pedicel, calyx lobes 5, ca. 1 mm long, obovate or oblanceolate, acute at tip, thickened and dark except thin membranous margins; disk glands 5, rectangular or tongue-shaped; style 3, free, recurved almost up to the base, deeply bilobed. *Capsules* ca. 1.5 mm across, oblate, obtusely trilobed; seeds trigonous, ca. 1 mm long, light brown, with 6–7 straight longitudinal lines on the back.

*Distribution:* India (Rajasthan).

*Phenology:* Rainy to winter season.

*Habitat:* Dried ditches around tank and along wet bank of the tank in clay soil.

*Notes:* In gross morphology, this species resembles *Andrachne telephioides* L., but can be distinguished by spatulate leaves, toothed to lacinate stipules, absence of petals, basally connate 5 stamens, rectangular or tongue-shaped female disk glands and deeply (almost up to the base) bilobed style.

*Specimens examined:* India, Rajasthan, Ajmer, Village Naikhera side, Kekri Tank, 1550 ft. 30.12.1959, V. S. Sharma 1385 (LWG-Type); same locality, 1.10.2005, R. R. Rao, Vishwanatha & T. N. Parameswaran 377 (CIMAP, The acronym is yet to find a place in *Index Herbariorum*).

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