

SHORT COMMUNICATION

RUELLIA PSEUDOPATULA: AN ADDITION TO MADHYA PRADESH FLORA
FROM KUNO NATIONAL PARKAshutosh Kumar Verma¹, Sanjay Mishra^{2*}, B. Lakshmanudu² and O N Maurya²Department of Botany, Siddharth University, Kapilvastu, Siddharthnagar, Uttar Pradesh 272202¹Botanical Survey of India, Central Regional Centre, Prayagraj, Uttar Pradesh 211002²Email: [*sanjayalld74@gmail.com](mailto:sanjayalld74@gmail.com)

Received-03.09.2025, Revised-15.09.2025, Accepted-29.09.2025

Abstract: In the present paper, the occurrence of *Ruellia pseudopatula* Ensermu in Madhya Pradesh, is being reported first time for the flora of Madhya Pradesh. A brief description with updated nomenclature, locality, and photographs have been provided.

Keywords: Acanthaceae, Addition, Flora, Kuno, Madhya Pradesh

INTRODUCTION

Family Acanthaceae contributes 208 genera with estimation of approximately 4,900 species (Manzitto-Tripp *et al.* 2021). The genus, commonly known as wild petunias, is a diverse group of flowering plants in the family Acanthaceae. Named after the 16th-century French herbalist Jean Ruelle, the genus includes evergreen shrubs distributed in warm and tropical meadows and open woods of Africa, Asia, and South America with about 380 species. The genus *Ruellia* L. (Acanthaceae) with about 380 species includes evergreen shrubs distributed in warm and tropical meadows and open woods of Africa, Asia, and South America. The Genus is horticulturally important and exhibit remarkable diversity in floral color, size and shape of corolla lobes, tubes and throat (Tripp 2007, Tripp *et al.* 2013). Many species of the genus have antinociceptive, antioxidant, analgesic, antispasmodic, antiulcer, antidiabetic and anti-inflammatory properties. The main phytochemicals constituents are glycosides, alkaloids, flavonoids and triterpenoids (Khurram *et al.*, 2015). So far, 09 species have been reported from India. Among these, two species namely *Ruellia suffruticosa* Roxb. and *Ruellia tuberosa* L. have been reported from the Madhya Pradesh (Mudgal *et al.* 1997). During the botanical explorations (2019-2022) in Kuno National

Park, the authors came across one interesting specimen of *Ruellia* L. (Acanthaceae). On critical study and perusal of literature, it has been identified as *Ruellia pseudopatula* Ensermu. So far, this species has not been reported from Madhya Pradesh (Mudgal *et al.* 1997 and Khanna *et al.* 2001) and thus forms a new distributional record for the state. Key to the species along with short description, relevant notes, color plate, etc. is provided here for further collection and identification in the field.

MATERIALS AND METHODS

The specimen was collected from Palpur west locality in Kuno National Park. Field photographs and GPS location were recorded. The vegetative and reproductive features of the collected specimen were examined through a stereo-zoom binocular microscope (Motic SMZ-161). The identity of the species was confirmed through its protologue, and herbarium records. The photoplates were prepared using Adobe Photoshop software (version 7.0). The voucher specimen has been prepared following the protocol of Jain & Rao 1977, Tomar *et al.* 2008, Tomar 2024 and it is deposited at the herbarium of Central Regional Circle, Botanical Survey of India, Prayagraj (BSA).

*Corresponding Author



Plate 1. A. Flower, B. Fruit, C. Herbarium specimen

DESCRIPTION

Ruellia pseudopatula Ensermu Kew Bull. 57: 747, f. 1. 2002; Karthikeyan *et al.*, Flowering plants of India (Dicotyledons) 1:37.2009.

Shrubby herb. Stems 15-40 cm high, much branched, velvet-hairy with descending, deflexed, white hairs. Leaves 1.5-3.0 x 1-2 cm, ovate to ovate-elliptic or sometimes obovate, narrowed to wedge-shaped or pointed at the base, margins entire, blunt to flat or sometimes notched at the tip, velvety hairy. Petiole 3-6 mm long. Inflorescence axillary, Flowers in 1-3-flowered cymes. Bracts linear to narrowly-elliptic or narrowly-obovate, 11-15 x 2-3 mm with 2-4 mm long stalk. Flowers prominently long, white, 4.5-6.0 cm long; corolla tube 4.0-5.2 cm long, lower portion narrow, 2.4-3.5 cm long, extreme base 1.5-2 mm wide, 1.2-1.5 mm above; upper enlarged portion 1.4-1.8 cm long, 6-7 mm wide at the tip, velvet-hairy outside. Corolla 7-10 x 8 mm, nearly round to rounded to flat at the tip, velvet-hairy outside. Calyx tube 1-1.5 mm long; lobes 4-5 x 1-1.2 mm, subulate. Stamens inserted at junction between narrow and enlarged portions. Ovary long, glabrous; style 3.3-4.0 cm long; stigma bilobed. Capsule 13-16 x 5-6 mm, glabrous, 8-10 seeded.

Flowering & Fruiting: September- December.

Distribution: The native range of this species is North East Ethiopia to Djibouti, Arabian Peninsula, North West India. It is a sub shrub and grows primarily in the desert or dry shrub land biome. India (North West India: Haryana, Punjab, Madhya Pradesh)

Specimen examined: INDIA, Madhya Pradesh; Kuno National Park, 26 March 2022, Ashutosh Kumar Verma & B. Lakshmanudu 80248 (BSA)

Key of the species occurring in Madhya Pradesh

1a Root tuberous; peduncle < 2 cm long—*R. tuberosa*

b Root not tuberous; peduncle > 5 cm long—2

2a Flowers pale white; style 16-20 mm long—*R. suffruticosa*

2b. Flowers pure white; style 35-40 mm long—*R. pseudopatula*

ACKNOWLEDGEMENTS

The authors are thankful to Director, Botanical Survey of India, Kolkata, for providing facilities and constant support and to the Ministry of Environment, Forests and Climate Change for providing necessary facilities and support through the Director BSI, Kolkata.

REFERENCES

Jain, S.K. and Rao, R.R. (1977). Handbook of Field and Herbarium Methods. Today and Tomorrow Printers and Publishers, New Delhi, India, 150 pp.

[Google Scholar](#)

Khanna, K.K., Kumar A., Dixit R.D. and Singh, N.P. (2001). Supplementary flora of Madhya Pradesh. BSI Publications, Calcutta, India.

[Google Scholar](#)

Khurram A., Muhammad U., Chaudhary, B. A., Ahmad, A., Afzal, S. & Malik, S. 2015. Genus *Ruellia*: Pharmacological and Phytochemical Importance in Ethnopharmacology. *Acta Poloniae Pharmaceutica - Drug Research*, 72:5 pp. 821-827.

[Google Scholar](#)

Manzitto-Tripp, E.A., I. Darbyshire, T.F. Daniel, C.A. Kiel and McDade, L.A. (2021). Revised classification of Acanthaceae and worldwide dichotomous keys. *Taxon*, 71(5): 103–153. <https://doi.org/10.1002/tax.12600>

[Google Scholar](#)

Mudgal, V., Khanna, K.K. and Hajra, P.K. 1997. *Flora of Madhya Pradesh, Primulaceae to ceratophyllaceae*. Vol. II. Botanical Survey of India, Calcutta.

[Google Scholar](#)

Tripp, E.A. (2007). Evolutionary relationships within the species-rich genus *Ruellia* (Acanthaceae). *Systematic Botany* 32(3):628–649. <https://doi.org/10.1600/036364407782250625>

[Google Scholar](#)

Tripp, E.A., T.F. Daniel, S. Fatimah and McDade, L.A. (2013). Phylogenetic Relationships within *Ruellieae* (Acanthaceae) and a Revised Classification. *International Journal of Plant Sciences*, 174(1): 97–137. <https://doi.org/10.1086/668248>

[Google Scholar](#)

Tomar, A., Singh, H. and Singh, V. (2008). Exotic elements in the flora of Baghpat district, Uttar Pradesh. *Indian Journal of Forestry*, 31 (3): 463-471. DOI: <https://doi.org/10.54207/bsmps1000-2008-Q1N630>

[Google Scholar](#)

Tomar, A. (2024). *Plant Resources of Meerut College Campus, Meerut (U.P.) India: Trees*. Bishen Singh Mahendra Pal Singh, Dehradun, India.

[Google Scholar](#)

