

The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under Commons Attribution 4.0 International License unless otherwise mentioned. JoTT allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

NOTE

HYPECOUM PENDULUM L. (PAPAVERACEAE: RANUNCULALES): A NEW RECORD FOR THE FLORA OF HARYANA, INDIA

Naina Palria, Nidhan Singh & Bhoo Dev Vashistha

26 October 2020 | Vol. 12 | No. 14 | Pages: 17057–17059

DOI: 10.11609/jott.6217.12.14.17057-17059





For Focus, Scope, Aims, Policies, and Guidelines visit https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-0 For Article Submission Guidelines, visit https://threatenedtaxa.org/index.php/JoTT/about/submissions#onlineSubmissions For Policies against Scientific Misconduct, visit https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-2 For reprints, contact <ravi@threatenedtaxa.org>

The opinions expressed by the authors do not reflect the views of the Journal of Threatened Taxa, Wildlife Information Liaison Development Society, Zoo Outreach Organization, or any of the partners. The journal, the publisher, the host, and the partners are not responsible for the accuracy of the political boundaries shown in the maps by the authors.

Member



Publisher & Host







Hypecoum pendulum L. (Papaveraceae: Ranunculales): a new record for the flora of Haryana, India

Naina Palria 10, Nidhan Singh 20 & Bhoo Dev Vashistha 30

¹Department of Botany, Government College, Narnaund, Hisar, Haryana 125039, India. ² Department of Botany, I.B. (PG) College, Panipat, Haryana 132103, India. ³ Department of Botany, Kurukshetra University, Kurukshetra, Haryana 136119, India. ¹nainapalria@gmail.com, ²nidhansinghkuk@gmail.com (corresponding author), ³bdvashistha@gmail.com

Genus Hypecoum Tourn. ex L. is the only member of subfamily Hypecooideae Prantl & Kundig belonging to the family Papaveraceae Juss. (Stevens 2001). It is represented by 15-20 species all over the world, with its distribution range from southern France, the Mediterranean region, northern Africa to southwestern Asia (Mabberley 2017; POWO 2019). In India, the genus is represented by three taxa within two species: Hypecoum leptocarpum Hook.f. & Thomson, H. pendulum L. var. pendulum and H. pendulum var. parviflorum (Kar. & Kir.) Cullen (Debnath & Nayar 1984; Ellis & Balakrishnan 1993; Kundu 2008). Debnath & Nayar (1984, p.46) have mentioned two varieties of H. pendulum as closely allied with overlapping characters. Currently, H. pendulum var. pendulum and H. pendulum var. parviflorum are considered synonyms of H. pendulum in POWO (2019), WFO (2020). Two known species in India (H. leptocarpum and H. pendulum) can be easily differentiated based on distinctly yellow flowers, mid lobe of inner petal being fimbriate, fruits larger, 30-75 mm long, and drooping on curved pedicel in H. pendulum in comparison to pinkish-violet to white flowers, mid lobe of inner petal

being non-fimbriate, fruits smaller, 12-30 mm long, and erect at maturity in H. leptocarpum (Ellis & Balakrishnan 1993).

During a botanical exploration, the first author came across an interesting wild herb growing around the cultivated fields, near Satrod Kalan Village of Hisar District, Haryana State. The number of individuals were very few and scattered, thus only three specimens were collected for reference and photographs were recorded in the field. After a detailed study of the relevant literature (Debnath & Nayar 1984; Ellis & Balakrishnan 1993), and studying the available herbarium records, these specimens were identified as Hypecoum pendulum L. This species was recorded for the first time in India from Kashmir (Singh 1975) and later from Rajasthan (Sharma 1976). As there is no previous record of H. pendulum L. in the published botanical literature for Haryana State (Jain et al. 2000; Kumar 2001), it is hereby being reported as the first authentic distribution record from the state. The collected voucher specimens (Image 2), have been deposited in the herbarium of Department of Botany, Kurukshetra University, Kurukshetra, Haryana.

Editor: D.S. Rawat, G.B. Pant University of Agriculture & Technology Pantnagar, India.

Date of publication: 26 October 2020 (online & print)

Citation: Palria, N., N. Singh & B.D. Vashistha (2020). Hypecoum pendulum L. (Papaveraceae: Ranunculales): a new record for the flora of Haryana, India. Journal of Threatened Taxa 12(14): 17057-17059. https://doi.org/10.11609/jott.6217.12.14.17057-17059

Copyright: © Palria et al. 2020. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use, reproduction, and distribution of this article in any medium by providing adequate credit to the author(s) and the source of publication.

Funding: Council of Scientific and Industrial Research (CSIR), New Delhi, India

Competing interests: The authors declare no competing interests.

Acknowledgements: Authors are indebted to the Department of Botany, Kurukshetra University, Kurukshetra for providing opportunity to do this work, and to the Council of Scientific and Industrial Research (CSIR), New Delhi for funding to carry out this work. Authors also acknowledge the digital specimen access facility provided by the Kew Herbarium and Edinburgh Herbarium.



Hypecoum pendulum L.,

Sp. Pl. 124, 1753; Singh in Geobios 2: 91. 1975; H.S. Debnath & M.P. Nayar, Fasc. Fl. India 17: 45. 1984; J.L. Ellis & N.P. Balakr. in B.D. Sharma & N.P. Balakr., Fl. India 2: 87. 1993. *H. procumbens* auct non. L.; Hook. f. & Thomson in Fl. Ind. 275, 1855 and in Hook. f., Fl. Brit. India 1: 120, 1872; Sharma in J. Bombay Nat. Hist. Soc. 73: 422–423, 1976.

Annual, procumbent, glaucous herb, about 5–30 cm tall, tap root well developed. Radical leaves many, forming a rosette at base, 3–10 cm long, petiole flat; lamina 2–3 pinnatisect, segments linear to setaceous, 2–6 mm long, apex acute; cauline leaves sub-opposite, palmatisect. Flowering stems many, dichotomously branched; inflorescence terminal, few-flowered cyme. Flowers small, ca. 5mm across, yellow, pedicellate; pedicel 5–12 mm long, nutant after flowering; bracts narrowly lobed; sepals two, 1.5–2 mm, broadly obovate, deciduous; petals four, yellow, two-whorled; outer one rhomboid, inner one tripartite; middle lobe fimbriate, spathulate, longer than the lateral two; lateral lobes elliptic-oblong, partially divergent, spotted with maroon-black dots. Stamens four, opposite to petals, filaments

black-spotted, two glands at the base of each filament, anthers yellow, linear; ovary cylindrical, stigmas two, recurved. Fruits 3–7 cm long, pendulous, lomentaceous; seeds very small, brown in colour (Image 1).

Specimens examined: KUK- NP 127, 19.iii.2017, 29.107°N & 75.815°E, 210m, Satrod Kalan, Hisar, Haryana, coll. Naina; KUK- NP 151, 20.iv.2020, 29.084°N & 75.795°E, 210m, Tibba, Ladwa, Hisar, Haryana, coll. Naina; K000283528!; K000283530! (Digital images at Kew Herbarium); E00392708! (Digital image at Edinburgh Herbarium).

H. pendulum L. naturally grows in dry and sandy soils along with some other herbs like Arnebia hispidissima (Lehm.) A. DC., Heliotropium curassavicum L., Asphodelus tenuifolius Cav. etc. The plant is rare in the area, and may usually remain unnoticed due to dissected, grasslike foliage and small, dull yellow flowers. In the vegetative phase, it can easily be overlooked for being any monocot. Besides, the fragmented or patchy distribution, the very short flowering-fruiting period also forms the cause behind this being unnoticed. During a recent visit in April, 2020 to a surrounding area, 50–60 individuals were found growing on sandy cliffs, locally

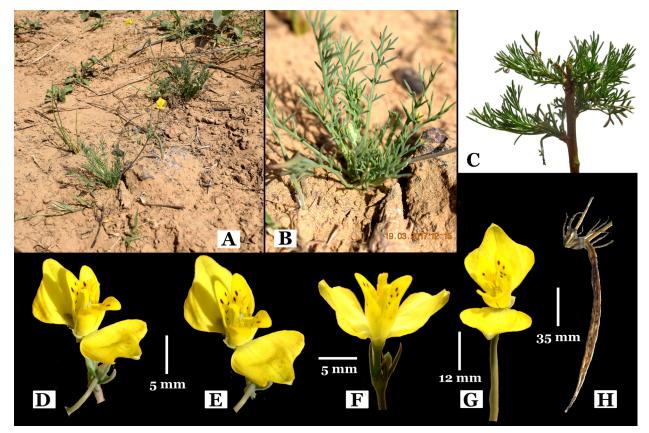


Image 1. A-H-Hypecoum pendulum L.: A-habitat | B & C-habit & leaves | D & E-flower-anterio-posterior view | F-flower-lateral view | G-pedicel-bearing flower | H-fruit (dried, image recorded from collection). © Naina Palria.



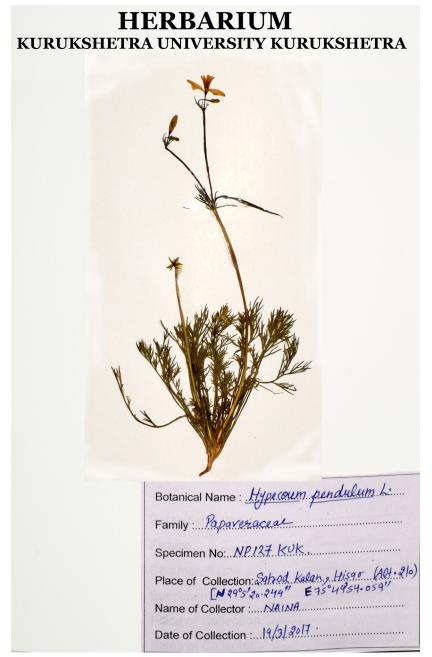


Image 2. Voucher specimen of *Hypecoum pendulum* L. from the locality of study. Photo by Naina Palria.

named as "Tibba", in Ladwa Village, Hisar District.

Flowering: April–May; Fruiting: May–August.

Distribution in India: Haryana, Jammu & Kashmir, Rajasthan.

References

- Debnath, H.S. & M.P. Nayar (1984).
 Papaveraceae & Hypecoaceae. Fascicles of Flora of India 17: 42–46.
- Ellis, J.L. & N.P. Balakrishnan (1993). Fumariaceae, pp. 34–87. In: Sharma, B.D. & N.P. Balakrishnan (Eds.). Flora of India, Volume 2. BSI, Calcutta, 625pp.
- Jain, S.P., D.M. Verma, S.C. Singh, J.S. Singh & S. Kumar (2000). Flora of Haryana. Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow, Uttar Pradesh, India. 266pp.
- Kumar, S. (2001). Flora of Haryana (Materials). Bishen Singh Mahendra Pal Singh, Dehradun, Uttrakhand, India. 507pp.
- **Kundu, S.R. (2008).** A Compendium of Papaveraceae *s.l.* in Indian sub-continent: Its distribution & Endemism. *International Journal of Botany* 4(3): 249–259.
- Mabberley, D.J. (2017). Mabberley's Plant-Book A portable dictionary of plants, their classification and uses. Cambridge University Press, Cambridge, UK, 1102pp.
- POWO (2019). Plants of the World Online. http://plantsoftheworldonline. org/. Accessed on 25 June 2020.
- Sharma, M. (1976). Hypecoum procumbens L.: A New record for India. Journal of the Bombay Natural History Society 73: 422– 423.
- Singh, G. (1975). Hypecoum pendulum L. A New record for India. Geobios (Jodhpur) 2: 91.
- Stevens, P.F. (2001). Angiosperm Phylogeny Website. Version 14, July 2017. Available at: http://www.mobot.org/MOBOT/research/APweb/. Accessed on 27 June 2020.
- WFO (2020): Hypecoum L. World Flora Online. http://www.worldfloraonline.org/taxon/wfo-4000018739. Accessed on 28 June 2020.

ZOUREACH





The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under Creative Commons Attribution 4.0 International License unless otherwise mentioned. JoTT allows allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

Contribution to the macromycetes of West Bengal, India: 63-68

- Rituparna Saha, Debal Ray, Anirban Roy & Krishnendu Acharya, Pp. 17014-

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

October 2020 | Vol. 12 | No. 14 | Pages: 16927-17062 Date of Publication: 26 October 2020 (Online & Print) DOI: 10.11609/jott.2020.12.14.16927-17062

Tiger Reserve, Terai Arc Landscape, India

17023

Notes

www.threatenedtaxa.org

Article

Elevational pattern and seasonality of avian diversity in Kaligandaki River Basin, central Himalaya

- Juna Neupane, Laxman Khanal, Basant Gyawali & Mukesh Kumar Chalise, Pp. 16927-16943

Communications

A highway to hell: a proposed, inessential, 6-lane highway (NH173) that threatens the forest and wildlife corridors of the Western Ghats, India

- H.S. Sathya Chandra Sagar & Mrunmayee, Pp. 16944-16953

Species diversity and feeding guilds of birds in Malaysian agarwood plantations

Nor Nasibah Mohd Jamil, Husni Ibrahim, Haniza Hanim Mohd Zain &

Evaluating performance of four species distribution models using Blue-tailed Green Darner Anax guttatus (Insecta: Odonata) as model organism from the Gangetic riparian zone

- Kritish De, S. Zeeshan Ali, Niladri Dasgupta, Virendra Prasad Uniyal, Jeyaraj Antony Johnson & Syed Ainul Hussain, Pp. 16962-16970

Butterfly species richness and diversity in rural and urban areas of Siraigani, Bangladesh

– Sheikh Muhammad Shaburul Imam, Amit Kumer Neogi, M. Ziaur Rahman & M. Sabbir Hasan, Pp. 16971-16978

Chroococcalean blue green algae from the paddy fields of Satara District, Maharashtra, India

- Sharada Jagannath Ghadage & Vaneeta Chandrashekhar Karande, Pp. 16979-16992

Short Communications

Avifaunal diversity along the riverine habitats of Papikonda National Park, Andhra Pradesh, India

- Paromita Ray, Giridhar Malla, Upma Manral, J.A. Johnson & K. Sivakumar, Pp. 16993-16999

Medetomidine may cause heart murmur in Cougars and Jaguars: case report

- Thiago Cavalheri Luczinski, Gediendson Ribeiro de Araújo, Matheus Folgearini Silveira, Murillo Daparé Kirnew, Roberto Andres Navarrete, Jorge Aparecido Salomão-Jr, Letícia Alecho Reguena, Jairo Antonio Melo dos Santos, Marcell Hideki Koshiyama, Cristiane Schilbach Pizzutto & Pedro Nacib Jorge-Neto, Pp. 17000-17002

Description of a new species of Omyomymar Schauff from India with a key to Oriental species and first report of Palaeoneura markhoddlei Triapitsyn (Hymenoptera: Mymaridae) from the Indian subcontinent

- H. Sankararaman & S. Manickavasagam, Pp. 17003-17008

Incursion of the killer sponge Terpios hoshinota Rützler & Muzik, 1993 on the coral reefs of the Lakshadweep archipelago, Arabian Sea

- Rocktim Ramen Das, Chemmencheri Ramakrishnan Sreeraj, Gopi Mohan, Kottarathil Rajendran Abhilash, Vijay Kumar Deepak Samuel, Purvaja Ramachandran & Ramesh Ramachandran, Pp. 17009-17013

Nur Hidayat Che Musa, Pp. 16954-16961

- Badri Baral, Sudeep Bhandari, Saroj Koirala, Parashuram Bhandari, Ganesh Magar, Dipak Raj Basnet, Jeevan Rai & Hem Sagar Baral, Pp. 17028–17031

First distributional record of the Lesser Adjutant Leptoptilos javanicus Horsfield,

A rare camera trap record of the Hispid Hare Caprolagus hispidus from Dudhwa

- Sankarshan Rastogi, Ram Kumar Raj & Bridesh Kumar Chauhan, Pp. 17024-

First record of African Sailfin Flying Fish Parexocoetus mento (Valenciennes,

1847) (Beloniformes: Exocoetidae), from the waters off Andaman Islands, India – Y. Gladston, S.M. Ajina, J. Praveenraj, R. Kiruba-Sankar, K.K. Bineesh &

S. Dam Roy, Pp. 17032–17035

1821 (Ciconiiformes: Ciconiidae) from Sindhuli District, Nepal

A first distribution record of the Indian Peacock Softshell Turtle Nilssonia hurum (Gray, 1830) (Reptilia: Testudines: Trionychidae) from Mizoram, India

 Gospel Zothanmawia Hmar, Lalbiakzuala, Lalmuansanga, Dadina Zote, Vanlalhruaia, Hmar Betlu Ramengmawii, Kulendra Chandra Das & Hmar Tlawmte Lalremsanga, Pp. 17036-17040

A frog that eats foam: predation on the nest of Polypedates sp. (Rhacophoridae) by Euphlyctis sp. (Dicroglossidae)

- Pranoy Kishore Borah, Avrajjal Ghosh, Bikash Sahoo & Aniruddha Datta-Roy, Pp. 17041-17044

New distribution record of two endemic plant species, Euphorbia kadapensis Sarojin. & R.R.V. Raju (Euphorbiaceae) and Lepidagathis keralensis Madhus. & N.P. Singh (Acanthaceae), for Karnataka, India

– P. Raja, N. Dhatchanamoorthy, S. Soosairaj & P. Jansirani, Pp. 17045–17048

Cirsium wallichii DC. (Asteraceae): a key nectar source of butterflies

- Bitupan Boruah, Amit Kumar & Abhijit Das, Pp. 17049-17056

Hypecoum pendulum L. (Papaveraceae: Ranunculales): a new record for the flora of Haryana, India

– Naina Palria, Nidhan Singh & Bhoo Dev Vashistha, Pp. 17057–17059

Addendum

Erratum and addenda to the article 'A history of primatology in India'

– Mewa Singh, Mridula Singh, Honnavalli N. Kumara, Dilip Chetry & Santanu Mahato, Pp. 17060-17062

Member



Publisher & Host

