



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](https://creativecommons.org/licenses/by/4.0/) 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)

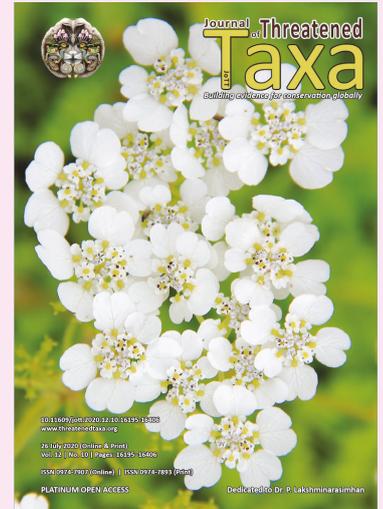
NOTE

***HERMINIUM LONGILOBATUM* (ORCHIDACEAE), A NEW RECORD FOR BHUTAN**

Ugyen Dechen, Tandin Wangchuk & Lam Norbu

26 July 2020 | Vol. 12 | No. 10 | Pages: 16396–16398

DOI: [10.11609/jott.5887.12.10.16396-16398](https://doi.org/10.11609/jott.5887.12.10.16396-16398)



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>](mailto: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





Herminium longilobatum (Orchidaceae), a new record for Bhutan

Ugyen Dechen¹, Tandin Wangchuk² & Lam Norbu³

^{1,2,3}Tashigang Territorial Forest Division, Department of Forest and Park Services of Bhutan, Ministry of Agriculture and Forests, Royal Government of Bhutan.

¹udechen@moaf.gov.bt, ²twangchoks@gmail.com, ³lamnorbu0@gmail.com (corresponding author)

Herminium L. is a genus of terrestrial or rarely epiphytic orchids belonging to the family Orchidaceae (subfamily Orchidoideae, tribe Orchideae and subtribe Orchidinae) (Chase et al. 2015). It is represented by 49 species in the world, distributed in the northern hemisphere with a clear center of diversity in the Himalaya (Pearce & Cribb 2002; Raskoti et al. 2017). Species are characterized by small greenish, whitish or yellowish flowers on the raceme, a (sub) globose tuber, a lip with a concave or spurred base, and column with the stigma-lobes not adnate to the base of the lip (Raskoti et al. 2017).

Bhutan harbors 19 species of *Herminium* (Pearce & Cribb 2002; Gurung 2006; Dalstrom 2017; National Biodiversity Centre 2017; Raskoti et al. 2017) namely, *H. albomarginatum* (King) X.H. Jin, *H. albosanguineum* Renz, *H. albovirens* (Renz) X.H. Jin, *H. clavigerum* Lindl., *H. elisabethae* Duthie, *H. fallax* (Lindl.) Hook.f., *H. gracile* King & Pantl., *H. handelii* X.H. Jin, *H. himalayanum* (Renz) X.H. Jin, *H. josephi* Rchb.f., *H. lanceum* (Thunb. ex Sw.) Vuijk., *H. latilabre* Lindl., *H. macrophyllum* (D.Don) Dandy, *H. monophyllum* (D.Don) P.F. Hunt & Summerh., *H. monorchis* (L.) R.Br., *H. orbiculare* Hook.f.,

H. pugioniforme Lindl. ex Hook.f., *H. pygmaeum* Renz, and *H. quinquelobum* King & Pantl.

During a recent field exploration, we found an interesting epiphytic orchid growing on the dead trunk of an oak tree *Quercus oxyodon* embedded with thick mosses and epiphytic fern at an elevation of 2,746m (27.618°N & 91.531°E) inside the cool broad-leaved forest on 24 September 2018, in the Serkhang-chuu catchment area of Trashi Yangtse District. Ferns, shrubs, *Symplocos* species, bamboos, and *Quercus semicarpifolia* were other associated vegetation in the area. Photographs of the orchid were sent to the orchid expert, Dr. Dhan Bahadur Gurung, for identification and subsequently it was confirmed as *Herminium longilobatum* S.N. Hedge & A.N. Rao. The specimen was collected on 17 October 2019, and preserved at the Forest Range Office, Doksum under the Trashigang Forest Division. This constitutes the 20th representative of the genus from Bhutan. The same is being presented here with a short description, phenology, ecology and color plates.

Editor: Pankaj Kumar, Kadoorie Farm and Botanic Garden (KFBG) Corporation, Tai Po, Hong Kong S.A.R., P.R.China. **Date of publication:** 26 July 2020 (online & print)

Citation: Dechen, U., T. Wangchuk & L. Norbu (2020). *Herminium longilobatum* (Orchidaceae), a new record for Bhutan. *Journal of Threatened Taxa* 12(10): 16396–16398. <https://doi.org/10.11609/jott.5887.12.10.16396-16398>

Copyright: © Dechen 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: None.

Competing interests: The authors declare no competing interests.

Acknowledgements: We are grateful to Mr. Stig Dalström, Associate at the Lankester Botanical Garden, University of Costa Rica, Cartago, Costa Rica and Mr. Dhan Bahadur Gurung (PhD), Professor of College of Natural Resources (CNR), Royal University of Bhutan (RUB), Bhutan for species identification and asserting as the new records for Bhutan. We are highly indebted to Mr. Phuntsho Thinley (PhD), Principal Forestry Officer, Ugyen Wangchuk Institute for Conservation and Environmental Research (UWICER), Bumthang for making us part of his wildlife water relationship study team and field survey in the Serkhangchu catchment, Yangtse. We are also indebted to Mr. Karma Leki, Chief Forestry Officer, Trashigang Forest Division, Eastern Bhutan for his continuous encouragement and support in studying flora and fauna.



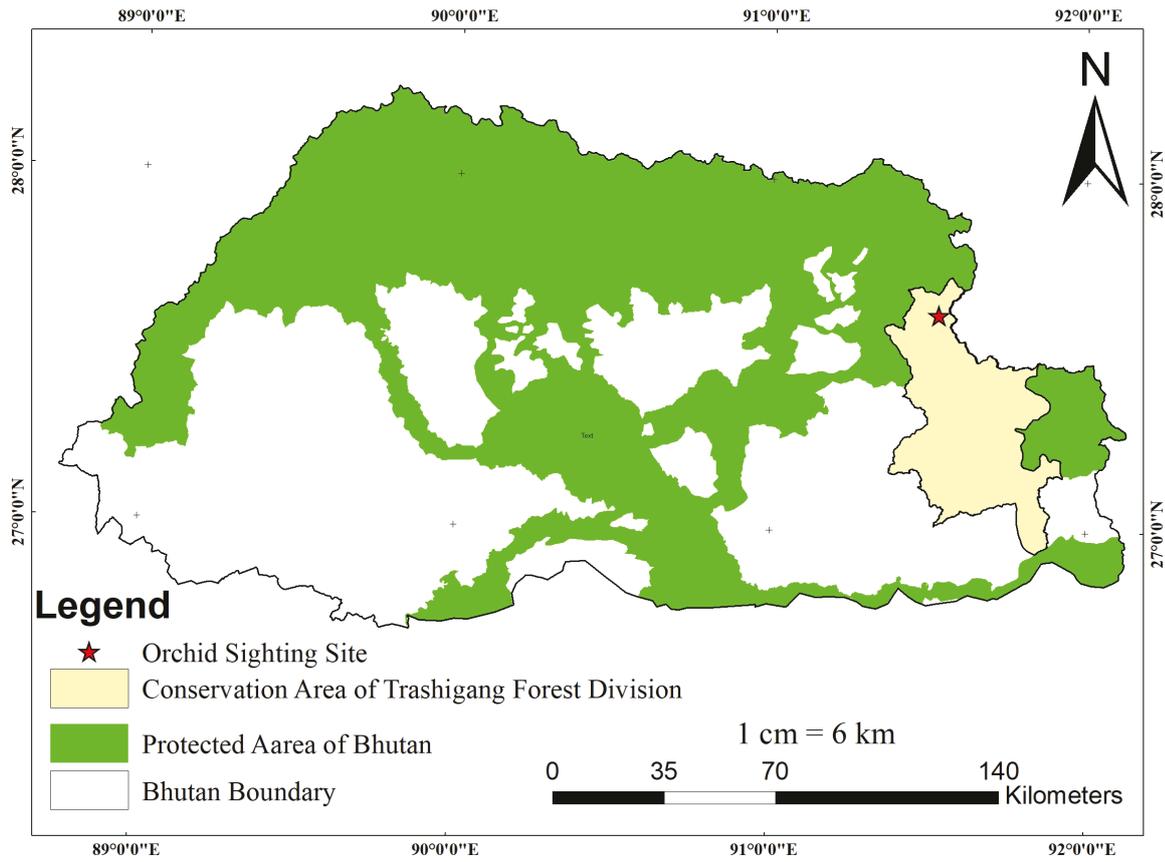


Figure 1. Location of *Herminium longilobatum* in Bhutan.



Image 1. *Herminium longilobatum* S.N. Hegde & A.N. Rao from Bhutan: A—plant in its natural habitat | B—close up of the inflorescence. © Tandin Wangchuk.

***Herminium longilobatum* S.N. Hegde & A.N. Rao
Himalayan Pl. J. 1(2): 47 (1982).**

Type: Yarlung Zangbo–Brahmaputra Region, Towang, 2,800 m, Hegde 3208-A (TIPI).

Plant epiphytic herbs, up to 30–50 cm tall, including inflorescence. Tubers 1 or 2, ovoid, globose to oblong. Pseudostem up to 8–10 cm, long, slender, covered with two tubular sheaths of which the basal is much shorter and few well-spaced leaves near the middle. Leaves linear to oblong-lanceolate, 8–20 × 0.5–1.5 cm, acuminate, narrow at base into a long tubular sheath clasping the pseudo stem. Scape with inflorescence 12–20 cm tall; inflorescence terminal raceme, peduncle terete, with peduncle-scales 0.5–2.4 cm; rachis 5–18 cm, many flowered, flowers laxly arranged. Floral bracts ovate-lanceolate, 1.5–5.0 mm, slightly shorter than the ovary and apex acuminate. Flowers about 5 × 5 mm, opening widely, greenish-white. Sepals subequal, ovate, 2.0 × 1.5 mm, subacute, concave. Petals lanceolate, 2.0 × 1.5 mm, apex subacute. Lip much longer than the other perianth lobes, oblong, 3-lobed, widened at base, with a callus at base of attachment to the column, midlobe short, lanceolate, obtuse; lateral lobes 10mm long, more than 10 times longer than the midlobe, filiform, uncoiled. Column 1mm, short; anther cells 2, parallel; staminodes 2, lateral; rostellum two-lobed; stigmas 2, transversely oblong, divergent. The fruit oblong, 7mm long. Ovary sessile, resupinate, beaked.

Flowering and Fruiting: August–September

Habitat and Ecology: Orchids were found growing on the dead trunk of Oak species *Quercus oxyodon* (five clumps) covered with mosses at an elevation of 2,746m inside the cool broad-leaved forest.

Distribution: Bhutan, China, India, Nepal.

Specimens examined: Bhutan: Trashi Yangtse District, Serkangchu catchment, 2,746m, 24.ix.2018., Tandin W., Ugyen D., and Lam N., (Haplotype: Doksum Forest Range). Yarlung Zangbo–Brahmaputra Region: Kameng District, Towang Hegde, 3208 A-C (Orchid Herbarium, Tipi); Phudong-Dirang, Hajra 54808 (Assam). Nepal: Sagarmatha, Solukhumbu District, below Sete, 2,500m, Raskoti B.B., 01299 (KATH).



Image 2. *Herminium longilobatum*—voucher specimen preserved at Doksum Forest Range, Trashigang Forest Division.

References

Chase, M.W., K.M. Cameron, J.V. Freudenstein, A.M. Pridgeon, G. Salazar, C.V.D. Berg & A. Schuiteman (2015). An updated classification of Orchidaceae. *Botanical Journal of the Linnean Society* 77: 151–174. <https://doi.org/10.1111/boj.1223>

Dalstrom, S. (2017). *Orchid Checklist of Bhutan*. National Herbarium, National Biodiversity Centre, MoAF, Serbithang, Thimphu, Bhutan. <http://www.bhutanbiodiversity.net/>, Accessed on 20 March 2020).

Gurung, D.B. (2006). *An illustrated Guide to the Orchid of Bhutan*. Thimphu: Royal University of Bhutan. DSB Publication.

National Biodiversity Centre (2017). *A Century of New Orchid Records in Bhutan*. Edt. Thimphu, Bhutan. Kuensel Cooperation Ltd.

Pearce, N.R. & P.J. Cribb (2002). *Flora of Bhutan Volume 3, Part 3: The Orchid of Bhutan*. Royal Botanic Garden Edinburgh & Royal Government of Bhutan. Thimphu, Bhutan.

Raskoti, B.B., A. Schuiteman, W. Jin & X. Jin (2017). A Taxonomic revision of *Herminium* L. (Orchidoideae, Orchidaceae). *PhytoKeys* (79): 1–74. <https://doi.org/10.3897/phytokeys.79.11215>





PLATINUM
OPEN ACCESS



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](https://creativecommons.org/licenses/by/4.0/) 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.

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

July 2020 | Vol. 12 | No. 10 | Pages: 16195–16406

Date of Publication: 26 July 2020 (Online & Print)

DOI: 10.11609/jott.2020.12.10.16195-16406

www.threatenedtaxa.org

Editorial

Pakshirajan Lakshminarasimhan: a plant taxonomist who loved plants and people alike
– Mandar N. Datar, Pp. 16195–16203

Communications

The worrisome conservation status of ecosystems within the distribution range of the Spectacled Bear *Tremarctos ornatus* (Mammalia: Carnivora: Ursidae) in Ecuador
– José Guerrero-Casado & Ramón H. Zambrano, Pp. 16204–16209

Living with Leopard *Panthera pardus fusca* (Mammalia: Carnivora: Felidae): livestock depredation and community perception in Kalakkad-Mundanthurai Tiger Reserve, southern Western Ghats
– Bawa Mothilal Krishnakumar, Rajarathinavelu Nagarajan & Kanagaraj Muthamizh Selvan, Pp. 16210–16218

An updated checklist of mammals of Odisha, India
– Subrat Debata & Himanshu Shekhar Palei, Pp. 16219–16229

Negative human-wildlife interactions in traditional agroforestry systems in Assam, India
– Yashmita-Ulman, Manoj Singh, Awadhesh Kumar & Madhubala Sharma, Pp. 16230–16238

Prevalence and morphotype diversity of *Trichuris* species and other soil-transmitted helminths in captive non-human primates in northern Nigeria
– Joshua Kamani, James P. Yidawi, Aliyu Sada, Emmanuel G. Msheliza & Usman A. Turaki, Pp. 16239–16244

Detection of hemoparasites in bats, Bangladesh
– Shariful Islam, Rakib Uddin Ahmed, Md. Kaisar Rahman, Jinnat Ferdous, Md. Helal Uddin, Sazed Akter, Abdullah Al Faruq, Mohammad Mahmudul Hassan, Ausraful Islam & Ariful Islam, Pp. 16245–16250

Ecology of the Critically Endangered *Singidia tilapia* (Teleostei: Cichlidae: *Oreochromis esculentus*) of lake Kayanja, Uganda and its conservation implications
– Richard Olwa, Herbert Nakiyende, Elias Muhumuza, Samuel Bassa, Anthony Taabu-Munyaho & Winnie Nkalubo, Pp. 16251–16256

Length-weight relationships of two conservation-concern mahseers (Teleostei: Cyprinidae: *Tor*) of the river Cauvery, Karnataka, India
– Adrian C. Pinder, Rajeev Raghavan, Shannon D. Bower & J. Robert Britton, Pp. 16257–16261

The identity and distribution of *Bhavana annandalei* Hora, 1920 (Cypriniformes: Balitoridae), a hillstream loach endemic to the Western Ghats of India
– Remya L. Sundar, V.K. Anoop, Arya Sidharthan, Neelesh Dahanukar & Rajeev Raghavan, Pp. 16262–16271

Records of two toads *Duttaphrynus scaber* and *D. stomaticus* (Amphibia: Anura: Bufonidae) from southeastern India
– S.R. Ganesh, M. Rameshwaran, Naveen A. Joseph, Ahamed M. Jerith & Sushil K. Dutta, Pp. 16272–16278

Some rare damselflies and dragonflies (Odonata: Zygoptera and Anisoptera) in Ukraine: new records, notes on distribution, and habitat preferences
– Alexander V. Martynov, Pp. 16279–16294

Floristic diversity of Anjaneri Hills, Maharashtra, India
– Sanjay Gajanan Auti, Sharad Suresh Kambale, Kumar Vinod Chhotupuri Gosavi & Arun Nivrutti Chandore, Pp. 16295–16313

A checklist of macrofungi (mushroom) diversity and distribution in the forests of Tripura, India
– Sanjit Debnath, Ramesh Chandra Upadhyay, Rahul Saha, Koushik Majumdar, Panna Das & Ajay Krishna Saha, Pp. 16314–16346

Short Communications

A threat assessment of Three-striped Palm Squirrel *Funambulus palmarum* (Mammalia: Rodentia: Sciuridae) from roadkills in Sigur Plateau, Mudumalai Tiger Reserve, Tamil Nadu, India
– Arockianathan Samson, Balasundaram Ramakrishnan & Jabamalainathan Leonaprinny, Pp. 16347–16351

Impact of vehicular traffic on birds in Tiruchirappalli District, Tamil Nadu, India
– T. Siva & P. Neelanarayanan, Pp. 16352–16356

Ichthyofaunal diversity of Manjeera Reservoir, Manjeera Wildlife Sanctuary, Telangana, India
– Kante Krishna Prasad, Mohammad Younus & Chelmal Srinivasulu, Pp. 16357–16367

New distribution record of the endemic and critically endangered Giant Staghorn Fern *Platynerium grande* (Fee) Kunze (Polypodiaceae) in central Mindanao
– Cherie Cano-Mangoang & Charissa Joy Arroyo Gumban, Pp. 16368–16372

Notes

First photographic record of the Dhole *Cuon alpinus* (Mammalia: Carnivora: Canidae) from the Sirumalai Hills in Tamil Nadu, India
– B.M. Krishnakumar & M. Eric Ramanujam, Pp. 16373–16376

Tracing heavy metals in urban ecosystems through the study of bat guano - a preliminary study from Kerala, India
– Jithin Johnson & Moncey Vincent, Pp. 16377–16379

Population dynamics and management strategies for the invasive African Catfish *Clarias gariepinus* (Burchell, 1822) in the Western Ghats hotspot
– Kuttanelloor Roshni, Chelapurath Radhakrishnan Renjithkumar, Rajeev Raghavan, Neelesh Dahanukar & Kutty Ranjeet, Pp. 16380–16384

First records of the black widow spider *Latrodectus elegans* Thorell, 1898 (Araneae: Theridiidae) from Nepal
– Binu Shrestha & Tobias Dörr, Pp. 16385–16388

First report of the assassin bug *Epidaurus wangi* (Heteroptera: Reduviidae: Harpactorinae) from India
– Swapnil S. Boyane & Hemant V. Ghate, Pp. 16389–16391

Observations of the damselfly *Platylestes cf. platystylus* Rambur, 1842 (Insecta: Odonata: Zygoptera: Lestidae) from peninsular India
– K.J. Rison & A. Vivek Chandran, Pp. 16392–16395

***Herminium longilobatum* (Orchidaceae), a new record for Bhutan**
– Ugyen Dechen, Tandin Wangchuk & Lam Norbu, Pp. 16396–16398

Recent record of a threatened holoparasitic plant *Sapria himalayana* Griff. in Mehao Wildlife Sanctuary, Arunachal Pradesh, India
– Arif Ahmad, Amit Kumar, Gopal Singh Rawat & G.V. Gopi, Pp. 16399–16401

Eleven new records of lichens to the state of Kerala, India
– Sonia Anna Zachariah, Sanjeeva Nayaka, Siljo Joseph, Pooja Gupta & Scaria Kadookunnel Varghese, Pp. 16402–16406

Member



Publisher & Host

