

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.

Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

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

NOTE

REPORT OF *BRADINOPYGA KONKANENSIS* JOSHI & SAWANT, 2020 (INSECTA: ODONATA) FROM KERALA, INDIA

Muhammed Haneef, B. Raju Stiven Crasta & A. Vivek Chandran

26 July 2021 | Vol. 13 | No. 8 | Pages: 19173–19176

DOI: 10.11609/jott.6484.13.8.19173-19176



For Focus, Scope, Aims, and Policies, visit https://threatenedtaxa.org/index.php/JoTT/aims_scope

For Article Submission Guidelines, visit <https://threatenedtaxa.org/index.php/JoTT/about/submissions>

For Policies against Scientific Misconduct, visit https://threatenedtaxa.org/index.php/JoTT/policies_various

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.

Publisher & Host





Report of *Bradinopyga konkanensis* Joshi & Sawant, 2020 (Insecta: Odonata) from Kerala, India

Muhammed Haneef¹ , B. Raju Stiven Crasta² & A. Vivek Chandran³

¹Department of Botany, Government Brennen College, Thalassery, Kannur, Kerala 670106, India.

²Holy Family Aided Senior Basic School, Kumbla post, Kasaragod, Kerala 671321, India.

³Department of Geology and Environmental Science, Christ College, Irinjalakuda, Thrissur, Kerala 680125, India.

¹haneefmangad@gmail.com, ²rajukidoor@gmail.com, ³avivekchandran2@gmail.com (corresponding author)

Bradinopyga konkanensis Joshi & Sawant, 2020 is a newly described species of dragonfly in the family Libellulidae reported from the western region of Peninsular India. It is the fourth species described in the genus *Bradinopyga* Kirby, 1893 (Schorr & Paulson 2020) and is believed to be a Western Ghats endemic associated with lateritic coastal habitats. It was described based on specimens from three localities in Sindhudurg, Ratnagiri, and Thane districts of Maharashtra, India. All additional records are from coastal areas of Maharashtra. The authors had predicted its occurrence in other coastal areas of the Western Ghats, especially in the Konkan region of Goa and Karnataka (Joshi & Sawant 2020). We report this species from Kidoor village, Kasaragod district, Kerala, India.

Kidoor is a village under Kumbla grama panchayat, Kasaragod district in northern Kerala, southern India (Figure 1). It has lateritic formations near the coast, paddy fields and patches of forest adjoining human habitations. The lateritic region has many natural ponds which attract odonates (Image 1). The common species encountered here are *Brachydiplax sobrina*, *Crocothemis servilia*, *Indothemis carnatica*, *Orthetrum sabina*, *Agriocnemis pygmaea*, *Ceriagrion rubiae*, and

Ischnura rubilio. On 18 July 2020, BRSC photographed a dragonfly that resembled *Bradinopyga geminata*, but with distinct brown colouration at the bases of hindwings (Image 2). On 20 July 2020, additional field photographs were taken from Kidoor and a specimen was collected. The specimen was studied under a stereo microscope (Olympus SZ61 with MAGCAM DC-5 CMOS 5 MP camera) and deposited in the collections of the Department of Zoology, Government Brennen College, Thalassery. All field photographs were taken using a Canon 600 D camera with 55–250 lens. Taxonomic terminology follows Garrison et al. (2006).

Material examined: GBCT.ENT.O23, 1 male, Kidoor (12.633°N, 74.981°E, 32m), 20.v.2020, coll. Muhammed Haneef.

Description: Abdomen: 27 mm, hindwing: 33 mm. Face mostly black, eyes dark greyish-brown, median ocellus dark brown, vertex elevated, ending in a pair of pointed tubercles (Image 3). Prothorax and thorax dark blue and pruinose, covered with fine brown hair. Wings hyaline with the bases tinted brown as follows: In the forewings, small portion of costal space, half of first cell of subcostal space, 1/10th of median space, half of cubito-anal space and 1/4th of first cell of anal anterior

Editor: Raymond J. Andrew, Hislop College, Nagpur, India.

Date of publication: 26 July 2021 (online & print)

Citation: Haneef, M., B.R.S. Crasta & A.V. Chandran (2021). Report of *Bradinopyga konkanensis* Joshi & Sawant, 2020 (Insecta: Odonata) from Kerala, India. *Journal of Threatened Taxa* 13(8): 19173–19176. <https://doi.org/10.11609/jott.6484.13.8.19173-19176>

Copyright: © Haneef et al. 2021. 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 thank the Society for Odonate Studies (SOS), Kerala for encouraging us to undertake field studies on odonates. The first author would like to thank Dr. V.S. Anilkumar, head of the Department, Botany, Government College, Kasaragod for permitting to use laboratory equipment for the study.



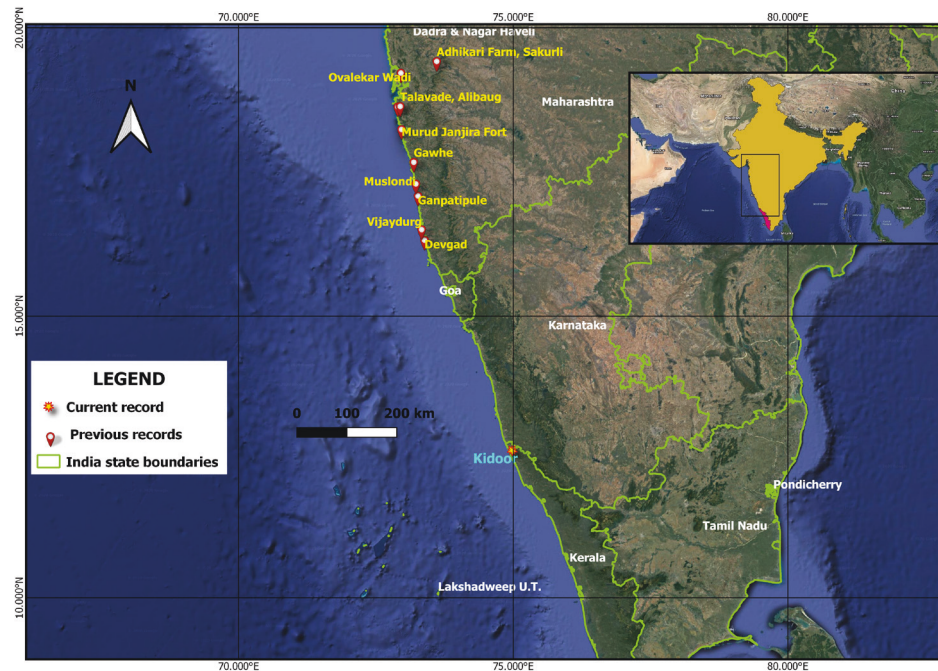


Figure 1. Observations of *Bradinopyga konkanensis*.

space. In the hindwings, small portion of costal space, $3/4^{\text{th}}$ of subcostal space, first cell of cubito-anal space extending just slightly into the second cell, and triangular marking encompassing 7–8 cells of anal anterior space, extending into neighbouring cells. Medially, two rows of cells present between: i) IRP2 & Rspl, ii) RP3+4 & MA, and iii) MP & CuA. Pterostigma bicoloured, central region black with dark brown on both sides (Image 4). Abdomen black, pruinosed bluish (Image 5). Secondary genitalia: Anterior hamuli with a base, a posteriorly facing lobe ending with sharply curved, hook-like, pointed end. Posterior hamuli with margins straight, rounded at apices, covered with thick brown hair (Image 6). Cerci pale brown with darker brown apices, conical, broader at base and pointed apically, covered with whitish hair. Epiproct dark brown, black at base and apices, curved slightly upwards (Images 7, 8, 9).

There are three other species of odonates—*Bradinopyga geminata* (Rambur, 1842), *Indothemis carnatica* (Fabricius, 1798) and *Indothemis limbata* (Selys, 1891)—which co-occur in the region and look similar to *B. konkanensis*, but they can be separated by clear distinguishing features (Fraser 1936; Joshi & Sawant 2020). We have tabulated the differences to aid precise identification of these species during field surveys (Table 1). We report *Bradinopyga konkanensis* from Kidoor village in Kerala, 450 km away from its nearest record (Devsgad, Maharashtra). Kidoor is at a distance of 6 km from the sea and falls within the range



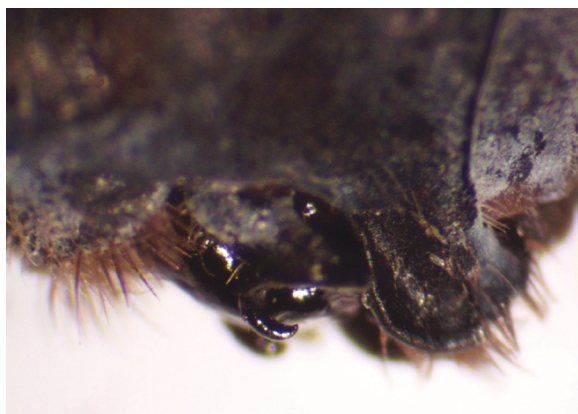
Image 1. A natural pond in the lateritic region of Kidoor Village. © B. Raju Stiven Crasta.



Image 2. *Bradinopyga konkanensis* in its lateritic habitat. © B. Raju Stiven Crasta.

Table 1. Differences between *Bradinopyga konkanensis* and closely similar species (males).

Feature \ Species	<i>Bradinopyga konkanensis</i>	<i>Bradinopyga geminata</i>	<i>Indothemis carnatica</i>	<i>Indothemis limbata</i>
No. of cell rows (medially) between: IRP ₂ & Rspl RP3+4 & MA MP & CuA	Two	Two	One	One
Basal wing colouration	Brown tint up to anal anterior space in forewings and extending to neighbouring cells of anal anterior space in hindwings	Hyaline (no colour)	Small point of amber yellow in hindwings	Dark mahogany brown, reaching the first antenodal nervure in forewings and second antenodal & arc in hindwings
Pterostigma	Bicolourous, black at the centre & brown at the sides	Bicolourous, black at the centre & white at the sides	Bright ochreous between thick black nervures	Ochreous, paler along posterior border, bordered with a thick black nervure anteriorly & a thin one posteriorly
Thorax	Dark blue	Dirty pale yellow, marbled and peppered with black irregularly (like granite)	Blackish-brown	Black
Abdomen	Black, pruinosed bluish	Black marbled with yellow	Blackish-brown with yellow markings obscurely showing through	Black with yellow markings forming a broken lateral stripe

**Image 3.** Head of *Bradinopyga konkanensis*. © Muhammed Haneef.**Image 4.** Wings of *Bradinopyga konkanensis*. © Muhammed Haneef.**Image 6.** *Bradinopyga konkanensis*: lateral view of secondary genitalia. © Muhammed Haneef.**Image 5.** *Bradinopyga konkanensis* habitus showing black abdomen with blue pruinoscence. © Muhammed Haneef.

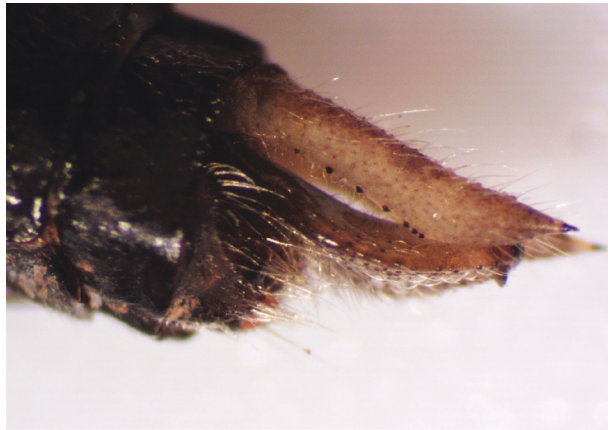


Image 7. *Bradinopyga konkanensis*: lateral view of caudal appendages. © Muhammed Haneef.

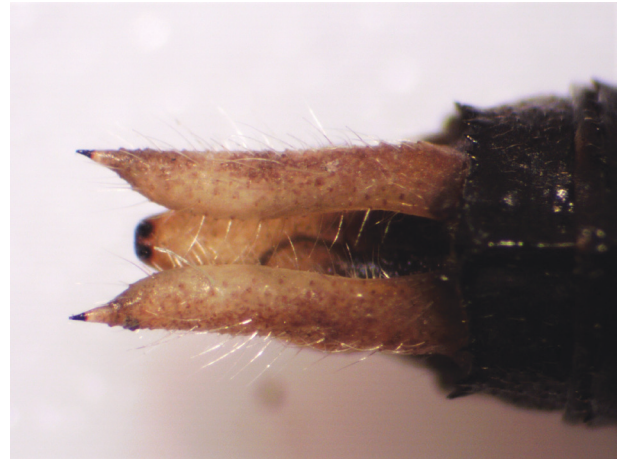


Image 8. *Bradinopyga konkanensis*: dorsal view of caudal appendages. © Muhammed Haneef.

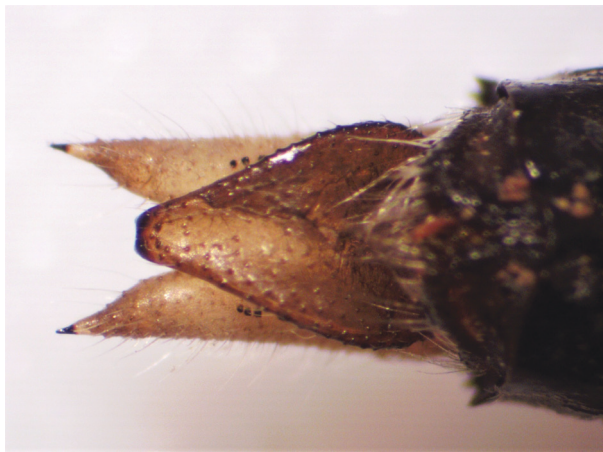


Image 9. *Bradinopyga konkanensis*: ventral view of caudal appendages. © Muhammed Haneef.

of distances from sea recorded earlier for the species (0–89 km). The observation adds credence to the opinion of the authors of the species that it could be found in lateritic coastal habitats in Goa and Karnataka. A survey of similar habitats in the coastal region of Kerala could also yield additional records.

References

- Fraser, F.C. (1936). *The Fauna of British-India including Ceylon and Burma, Odonata. Vol. III.* Taylor and Francis Ltd., London, 461pp.
- Garrison, R.W., N. von Ellenreider & J.A. Louton (2006). *Dragonfly genera of the New World: An Illustrated and Annotated Key to the Anisoptera.* The Johns Hopkins University Press, Baltimore, 368pp.
- Joshi, S. & D. Sawant (2020). Description of *Bradinopyga konkanensis* sp. nov. (Odonata: Anisoptera: Libellulidae) from the coastal region of Maharashtra, India. *Zootaxa*. 4779: 65–78. <https://doi.org/10.11646/zootaxa.4779.1.4>
- Schorr, M. & D. Paulson (2020). World Odonata List. <https://www.pugetsound.edu/academics/academic-resources/slater-museum/biodiversity-resources/dragonflies/world-odonata-list2/Electronic> version accessed on 26 July 2020.



www.threatenedtaxa.org

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 2021 | Vol. 13 | No. 8 | Pages: 18959–19190

Date of Publication: 26 July 2021 (Online & Print)

DOI: 10.11609/jott.2021.13.8.18959-19190

Communications

Distribution and habitat preferences of the Chinese Pangolin *Manis pentadactyla* (Mammalia: Manidae) in the mid-hills of Nepal

– Suman Acharya, Hari Prasad Sharma, Rajeev Bhattarai, Beeju Poudyal, Sonia Sharma & Suraj Upadhaya, Pp. 18959–18966

On the occurrence of the Himalayan Wolf *Canis lupus*, L. 1758 (Mammalia: Carnivora: Canidae) in the Gaurishankar Conservation Area, Nepal; its existence confirmed through sign and visual evidence in Rolwaling Valley

– Bishnu Prasad Pandey, Shankar Man Thami, Rabin Shrestha & Mukesh Kumar Chalise, Pp. 18967–18974

Group size, crowding, and age class composition of the threatened Sambar *Rusa unicolor* (Kerr, 1792) (Mammalia: Cetartiodactyla: Cervidae) in the semi-arid regions of northeastern Rajasthan, India

– Deepak Rai & Kalpana, Pp. 18975–18985

Study on the impacts of LULC change on the wildlife habitat and the livelihood of people in and around Dampa Tiger Reserve, Mizoram, India

– Sushanto Gouda, Janmejey Sethy, Netrapal Singh Chauhan & Harendra Singh Bargali, Pp. 18986–18992

Characterisation of breeding habitat of Grizzled Giant Squirrel *Ratufa macroura* (Mammalia: Sciuridae) in Chinnar Wildlife Sanctuary, Western Ghats, India

– Kiran Thomas & P.O. Nameer, Pp. 18993–19001

Seasonal prey availability and diet composition of Lesser Asiatic Yellow House Bat *Scotophilus kuhlii* Leach, 1821

– Shani Kumar Bharti & Vadmalai Elangovan, Pp. 19002–19010

Bird composition, diversity and foraging guilds in agricultural landscapes: a case study from eastern Uttar Pradesh, India

– Yashmita-Ulman & Manoj Singh, Pp. 19011–19028

Identification of a unique barb from the dorsal body contour feathers of the Indian Pitta *Pitta brachyura* (Aves: Passeriformes: Pittidae)

– Prateek Dey, Swapna Pravi Ray, Sanjeev Kumar Sharma, Padmanabhan Pramod & Ram Pratap Singh, Pp. 19029–19039

Moths of the superfamily Gelechioidea (Microlepidoptera) from the Western Ghats of India

– Amit Katewa & Prakash Chand Pathania, Pp. 19040–19052

On the diversity and abundance of riparian odonate fauna (Insecta) of the midstream Chalakkudy River, Kerala, India

– C. Nitha Bose, C.F. Binoy & Franci K. Kakkassery, Pp. 19053–19059

Species diversity and abundance patterns of epiphytic orchids in Aralam Wildlife Sanctuary in Kerala, India

– Jis Sebastian, Durairaj Kathiresan & Giby Kuriakose, Pp. 19060–19069

Status and conservation needs of *Cycas pectinata* Buch.-Ham. in its natural habitat at Baroiyadhala National Park, Bangladesh

– M.K. Hossain, M.A. Hossain, S. Hossen, M.R. Rahman, M.I. Hossain, S.K. Nath & M.B.N. Siddiqui, Pp. 19070–19078

Review

Limitations of current knowledge about the ecology of Grey Foxes hamper conservation efforts

– Maximilian L. Allen, Alexandra C. Avrin, Morgan J. Farmer, Laura S. Whipple, Emmarie P. Alexander, Alyson M. Cervantes & Javan M. Bauder, Pp. 19079–19092

Short Communications

On the freshwater fish fauna of Krishna River, Sangli District, Maharashtra, India

– Suresh M. Kumbhar, Shrikant S. Jadhav, Swapnali B. Lad, Abhijit B. Ghadage, Satyawar S. Patil & C. Shiva Shankar, Pp. 19093–19101

Diversity and distribution of the large centipedes (Chilopoda: Scolopendromorpha) in the Phia Oac - Phia Den National Park, Vietnam

– Le Xuan Son, Nguyen Thi Tu Anh, Tran Thi Thanh Binh, Thu Anh T. Nguyen & Anh D. Nguyen, Pp. 19102–19107

Diversity of ants in Aarey Milk Colony, Mumbai, India

– Akshay Gawade & Amol P. Patwardhan, Pp. 19108–19117

First record of ghost shrimp *Corallianassa coutierei* (Nobili, 1904) (Decapoda: Axiidea: Callichiridae) from Indian waters

– Piyush Vadher, Hitesh Kardani, Prakash Bambhaniya & Imtiaz Beleem, Pp. 19118–19124

A preliminary checklist of dragonflies and damselflies (Insecta: Odonata) of Vakkom Grama Panchayath, Thiruvananthapuram District, Kerala, India

– J. Arunima & P.O. Nameer, Pp. 19125–19136

Diversity pattern of butterfly communities (Lepidoptera) in different habitat types of Nahan, Himachal Pradesh, India

– Suveena Thakur, Suneet Bahrdwaj & Amar Paul Singh, Pp. 19137–19143

Descriptions of the early stages of *Vagrans egista sinha* (Lepidoptera: Nymphalidae) with notes on its host plant *Xylosma longifolia* Clos from the western Himalaya of India

– Pranav Gokhale & M.A. Yathumon, Pp. 19144–19148

Notes

First photographic record of Mishmi Takin *Budorcus taxicolor taxicolor* and Red Goral *Nemorhaedus baileyi* from Kamlang Tiger Reserve, Arunachal Pradesh, India

– Cheshta Singh & Deepti Gupta, Pp. 19149–19152

Utilisation of honey trap method to ensnare a dispersing sub-adult Bengal Tiger *Panthera tigris tigris* L. in a human dominated landscape

– Gobind Sagar Bhardwaj, Balaji Kari & Arvind Mathur, Pp. 19153–19155

First camera trap photographs of Indian Pangolin *Manis crassicaudata* (Mammalia: Pholidota: Manidae) from Pakistan

– Misbah Bint Riaz, Faraz Akrim, Siddiq Qasim, Syed Afaq Bukhari, Asad Aslam, Muhammad Waseem, Rizwana Imtiaz & Tariq Mahmood, Pp. 19156–19158

Photographic record of Lesser Flamingo *Phoeniconaias minor* (Aves: Phoenicopteridae) in Ramganga river, Bareilly, India

– Pichaimuthu Gangaiamaran, Aftab A. Usmani, G.V. Gopi, S.A. Hussain & Khursid A. Khan, Pp. 19159–19161

Total length and head length relationship in Mugger Crocodiles *Crocodylus palustris* (Reptilia: Crocodylia: Crocodylidae) in Iran

– Asghar Mobaraki, Elham Abtin, Malihe Erfani & Colin Stevenson, Pp. 19162–19164

First record of the hoverfly genus *Spilomyia* Meigen (Diptera: Syrphidae) for Pakistan

– Muhammad Asghar Hassan, Imran Bodlah, Riaz Hussain, Azan Karam, Fazlullah & Azaz Ahmad, Pp. 19165–19167

Rediscovery of Watson's Demon *Stimula swinhoei swinhoei* (Elwes & Edwards, 1897) (Lepidoptera: Hesperidae: Hesperinae) in Meghalaya, India after 60 years

– Suman Bhowmik & Atanu Bora, Pp. 19168–19170

A record of *Ourapteryx dierli* Inoue, 1994 (Lepidoptera: Geometridae: Ennominae) from the Garhwal Himalaya, India

– Arun P. Singh & Lekhendra, Pp. 19171–19172

Report of *Bradinopyga konkanensis* Joshi & Sawant, 2020 (Insecta: Odonata) from Kerala, India

– Muhammed Haneef, B. Raju Stiven Crasta & A. Vivek Chandran, Pp. 19173–19176

A new distribution record of *Bianor angulosus* (Karsch, 1879) (Araneae: Salticidae) from Kerala, India

– Nishi Babu, John T.D. Caleb & G. Prasad, Pp. 19177–19180

Notes on lectotypification of the Assam Ironwood *Mesua assamica* (King & Prain) Kosterm. (Calophyllaceae)

– Prantik Sharma Baruah, Sachin Kumar Borthakur & Bhoben Tanti, Pp. 19181–19184

On the rediscovery of a rare root parasite *Gleadovia ruborum* Gamble & Prain (Orobanchaceae) from Uttarakhand, western Himalaya, India

– Amit Kumar, Navendu V. Page, Bhupendra S. Adhikari, Manoj V. Nair & Gopal S. Rawat, Pp. 19185–19188

Occurrence of vivipary in *Ophiorrhiza rugosa* Wall. (Rubiaceae)

– Birina Bhuyan & Sanjib Baruah, Pp. 19189–19190

Publisher & Host

