

Building evidence for conservation globally

Journal of Threatened Taxa

40 **zoo**reach
Zoo Outreach Organisation
Years

10.11609/jott.2025.17.4.26763-26938

www.threatenedtaxa.org

26 April 2025 (Online & Print)

17(4): 26763-26938

ISSN 0974-7907 (Online)

ISSN 0974-7893 (Print)



Open Access





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

Publisher
Wildlife Information Liaison Development Society
www.wild.zooreach.org

Host
Zoo Outreach Organization
www.zooreach.org

Srivari Illam, No. 61, Karthik Nagar, 10th Street, Saravanampatti, Coimbatore, Tamil Nadu 641035, India
Registered Office: 3A2 Varadarajulu Nagar, FCI Road, Ganapathy, Coimbatore, Tamil Nadu 641006, India
Ph: +91 9385339863 | www.threatenedtaxa.org
Email: sanjay@threatenedtaxa.org

EDITORS

Founder & Chief Editor

Dr. Sanjay Molur

Wildlife Information Liaison Development (WILD) Society & Zoo Outreach Organization (ZOO),
Coimbatore, Tamil Nadu 641006, India

Assistant Editor

Dr. Chaithra Shree J., WILD/ZOO, Coimbatore, Tamil Nadu 641006, India

Managing Editor

Mr. B. Ravichandran, WILD/ZOO, Coimbatore, Tamil Nadu 641006, India

Associate Editors

Dr. Mandar Paingankar, Government Science College Gadchiroli, Maharashtra 442605, India

Dr. Ulrike Streicher, Wildlife Veterinarian, Eugene, Oregon, USA

Ms. Priyanka Iyer, ZOO/WILD, Coimbatore, Tamil Nadu 641006, India

Board of Editors

Dr. Russel Mittermeier

Executive Vice Chair, Conservation International, Arlington, Virginia 22202, USA

Prof. Mewa Singh Ph.D., FASc, FNA, FNAsc, FNAPsy

Ramanna Fellow and Life-Long Distinguished Professor, Biopsychology Laboratory, and
Institute of Excellence, University of Mysore, Mysuru, Karnataka 570006, India; Honorary
Professor, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore; and Adjunct
Professor, National Institute of Advanced Studies, Bangalore

Stephen D. Nash

Scientific Illustrator, Conservation International, Dept. of Anatomical Sciences, Health Sciences
Center, T-8, Room 045, Stony Brook University, Stony Brook, NY 11794-8081, USA

Dr. Fred Pluthero

Toronto, Canada

Dr. Priya Davidar

Sigur Nature Trust, Chadapatti, Mavinahalla PO, Nilgiris, Tamil Nadu 643223, India

Dr. John Fellowes

Honorary Assistant Professor, The Kadoorie Institute, 8/F, T.T. Tsui Building, The University of
Hong Kong, Pokfulam Road, Hong Kong

Prof. Dr. Mirco Solé

Universidade Estadual de Santa Cruz, Departamento de Ciências Biológicas, Vice-coordenador
do Programa de Pós-Graduação em Zoologia, Rodovia Ilhéus/Itabuna, Km 16 (45662-000)
Salobrinho, Ilhéus - Bahia - Brasil

Dr. Rajeev Raghavan

Professor of Taxonomy, Kerala University of Fisheries & Ocean Studies, Kochi, Kerala, India

English Editors

Mrs. Mira Bhojwani, Pune, India

Dr. Fred Pluthero, Toronto, Canada

Copy Editors

Ms. Usha Madgunaki, Zooreach, Coimbatore, India

Ms. Trisa Bhattacharjee, Zooreach, Coimbatore, India

Ms. Paloma Noronha, Daman & Diu, India

Web Development

Mrs. Latha G. Ravikumar, ZOO/WILD, Coimbatore, India

Typesetting

Mrs. Radhika, Zooreach, Coimbatore, India

Mrs. Geetha, Zooreach, Coimbatore India

Fundraising/Communications

Mrs. Payal B. Molur, Coimbatore, India

Subject Editors 2021–2023

Fungi

Dr. B. Shivaraju, Bengaluru, Karnataka, India

Dr. R.K. Verma, Tropical Forest Research Institute, Jabalpur, India

Dr. Vatsavaya S. Raju, Kakatiya University, Warangal, Andhra Pradesh, India

Dr. M. Krishnappa, Jnana Sahyadri, Kuvempu University, Shimoga, Karnataka, India

Dr. K.R. Sridhar, Mangalore University, Mangalagangothri, Mangalore, Karnataka, India

Dr. Gunjan Biswas, Vidyasagar University, Midnapore, West Bengal, India

Dr. Kiran Ramchandra Ranadive, Annasaheb Magar Mahavidyalaya, Maharashtra, India

Plants

Dr. G.P. Sinha, Botanical Survey of India, Allahabad, India

Dr. N.P. Balakrishnan, Ret. Joint Director, BSI, Coimbatore, India

Dr. Shonil Bhagwat, Open University and University of Oxford, UK

Prof. D.J. Bhat, Retd. Professor, Goa University, Goa, India

Dr. Ferdinando Boero, Università del Salento, Lecce, Italy

Dr. Dale R. Calder, Royal Ontario Museum, Toronto, Ontario, Canada

Dr. Cleofas Cervancia, Univ. of Philippines Los Baños College Laguna, Philippines

Dr. F.B. Vincent Florens, University of Mauritius, Mauritius

Dr. Merlin Franco, Curtin University, Malaysia

Dr. V. Irudayaraj, St. Xavier's College, Palayamkottai, Tamil Nadu, India

Dr. B.S. Kholia, Botanical Survey of India, Gangtok, Sikkim, India

Dr. Pankaj Kumar, Department of Plant and Soil Science, Texas Tech University, Lubbock, Texas, USA.

Dr. V. Sampath Kumar, Botanical Survey of India, Howrah, West Bengal, India

Dr. A.J. Solomon Raju, Andhra University, Visakhapatnam, India

Dr. Vijayasankar Raman, University of Mississippi, USA

Dr. B. Ravi Prasad Rao, Sri Krishnadevaraya University, Anantpur, India

Dr. K. Ravikumar, FRLHT, Bengaluru, Karnataka, India

Dr. Aparna Watve, Pune, Maharashtra, India

Dr. Qiang Liu, Xishuangbanna Tropical Botanical Garden, Yunnan, China

Dr. Noor Azhar Mohamed Shazili, Universiti Malaysia Terengganu, Kuala Terengganu, Malaysia

Dr. M.K. Vasudeva Rao, Shiv Ranjani Housing Society, Pune, Maharashtra, India

Prof. A.J. Solomon Raju, Andhra University, Visakhapatnam, India

Dr. Mandar Datar, Agharkar Research Institute, Pune, Maharashtra, India

Dr. M.K. Janarthanam, Goa University, Goa, India

Dr. K. Karthikeyan, Botanical Survey of India, India

Dr. Errol Vela, University of Montpellier, Montpellier, France

Dr. P. Lakshminarasimhan, Botanical Survey of India, Howrah, India

Dr. Larry R. Noblick, Montgomery Botanical Center, Miami, USA

Dr. K. Haridasan, Pallavur, Palakkad District, Kerala, India

Dr. Analinda Manila-Fajard, University of the Philippines Los Banos, Laguna, Philippines

Dr. P.A. Sinu, Central University of Kerala, Kasaragod, Kerala, India

Dr. Afroz Alam, Banasthali Vidyapith (accredited A grade by NAAC), Rajasthan, India

Dr. K.P. Rajesh, Zamorin's Guruvayurappan College, GA College PO, Kozhikode, Kerala, India

Dr. David E. Boufford, Harvard University Herbaria, Cambridge, MA 02138-2020, USA

Dr. Ritesh Kumar Choudhary, Agharkar Research Institute, Pune, Maharashtra, India

Dr. A.G. Pandurangan, Thiruvananthapuram, Kerala, India

Dr. Navendu Page, Wildlife Institute of India, Chandrabani, Dehradun, Uttarakhand, India

Dr. Kannan C.S. Warriar, Institute of Forest Genetics and Tree Breeding, Tamil Nadu, India

Invertebrates

Dr. R.K. Avasthi, Rohtak University, Haryana, India

Dr. D.B. Bastawade, Maharashtra, India

Dr. Partha Pratim Bhattacharjee, Tripura University, Suryamaninagar, India

Dr. Kailash Chandra, Zoological Survey of India, Jabalpur, Madhya Pradesh, India

Dr. Ansie Dippenaar-Schoeman, University of Pretoria, Queenswood, South Africa

Dr. Rory Dow, National Museum of Natural History Naturalis, The Netherlands

Dr. Brian Fisher, California Academy of Sciences, USA

Dr. Richard Gallon, Llandudno, North Wales, LL30 1UP

Dr. Hemant V. Ghate, Modern College, Pune, India

Dr. M. Monwar Hossain, Jahangirnagar University, Dhaka, Bangladesh

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

continued on the back inside cover

Cover: Nilgiri Large Burrowing Spider *Haploclostus nilgirinus*. Acrylic on canvas. © Aakanksha Komanduri.

TAXONOMIC DESCRIPTION

Sonerila bababudangiriensis

Karadakatti & Kakkalameli sp. nov.

(Images 1, 2b,d; Figure 2)

urn:lsid:ipni.org:names:77360569-1

Holotypus: India, Karnataka, Chikmagalur, Baba Budangiri, 13.404 N, 75.738 E, 01.09.2024, Prashant Karadakatti & Siddappa B. Kakkalameli, M008 (UASB5770), University of Agriculture Sciences, Bangalore.

Etymology: The specific epithet refers to the type locality that is Bababudangiri, from Chikkamagaluru District, Karnataka, India; the locality lies near the highest peak of Karnataka, Mullayangiri (1,930 m).

Diagnosis: Herb, perennial, erect, caulescent, tuber measures 1–1.5 cm diameter, spherical; habit 8–15 cm tall. Root branches fleshy, white to pale green at the lower to the upper. Leaves are 3–5 cm wide, 5–8 cm long, petiole 3–5 cm long with glabrous & claret tinge, six nerved, veins pinnate, three pairs arising from the base, 1–2 pairs from midrib above; lamina dark green

dorsal side with claret tinge spines or papillae scattered measured 1–3 mm, claret at ventral side, glabrous, densely gland-dotted, serrate, leaf base slightly orbicular with equal base and cordate; petioles 3–6 cm long, claret tinge, subscapose. Inflorescence bostryx cyme, 5–15 cm long, 4–12 flowered, unbranched; peduncle 4–13 cm long, claret tinge to pale green, glabrous, slightly quadrangular; pedicels 5–8 mm long, gland-tipped trichomes pale green in color; one bract 2–3 mm long and two opposite bracteoles, not prominent 1–2 mm, pale green. Flowers trimerous 1.8–2 cm long; pedicel sub-angular, 3–6 mm long in fruit, pale green, gland-tipped trichomes; hypanthium campanulate, 1.5–2 cm include anther & gynoecium, three-lobed, pale green base, gland-tipped trichomes; petals three, 5–8 mm, polypetalous, ovate to oblong, mucronate apex, pale pink adaxial, abaxial white, darker midrib; sepals pale green, 1–3 mm, polysepalous, gland-tipped trichomes; stamens three alternate to petals, filaments short measured 2–4 mm, pale pink, glabrous; anthers three, yellow, beaked at apex, glabrous, 3–5 mm anther lobes dorsifixed, cordate at base; ovary inferior, style filiform 0.8–1 cm,

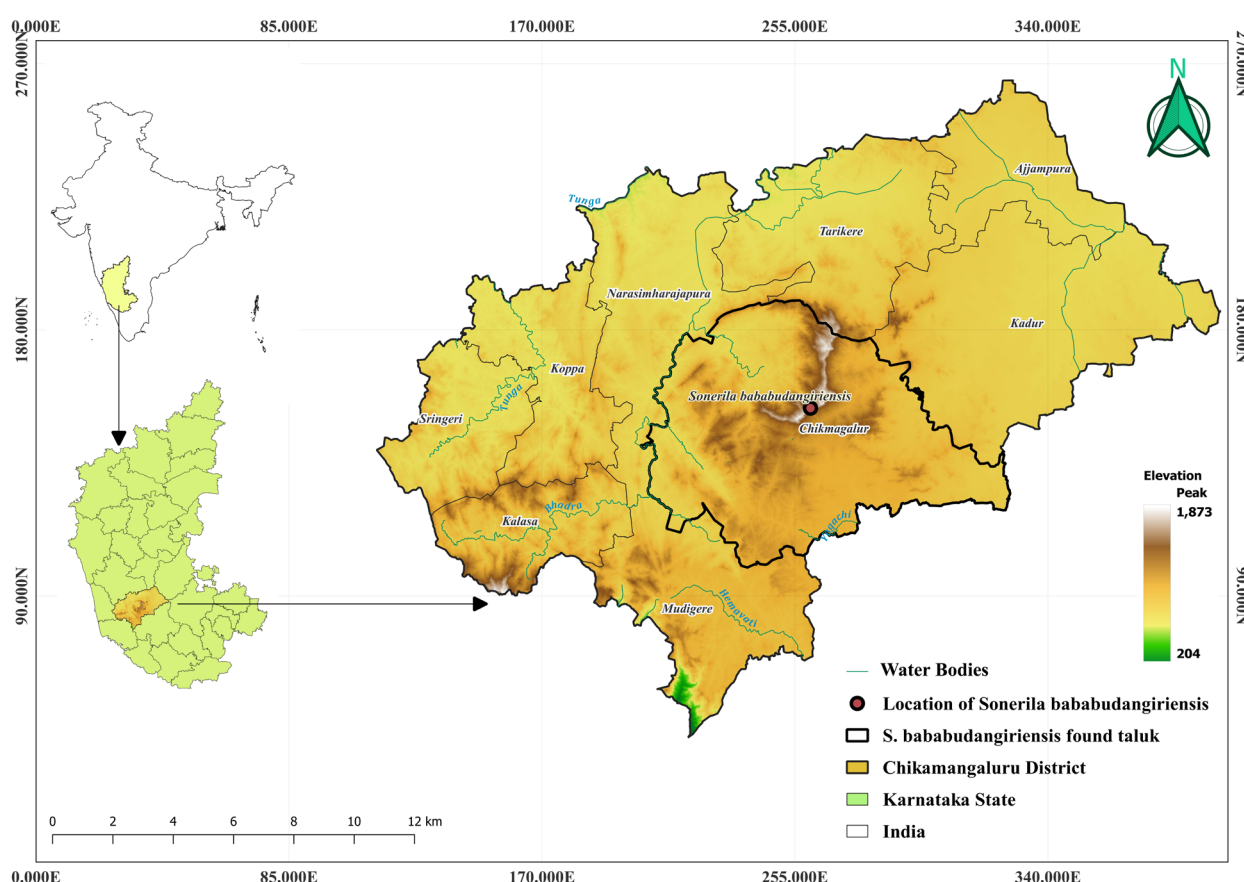


Figure 1. Distribution of *Sonerila bababudangiriensis* sp. nov. in Western Ghats of Karnataka.

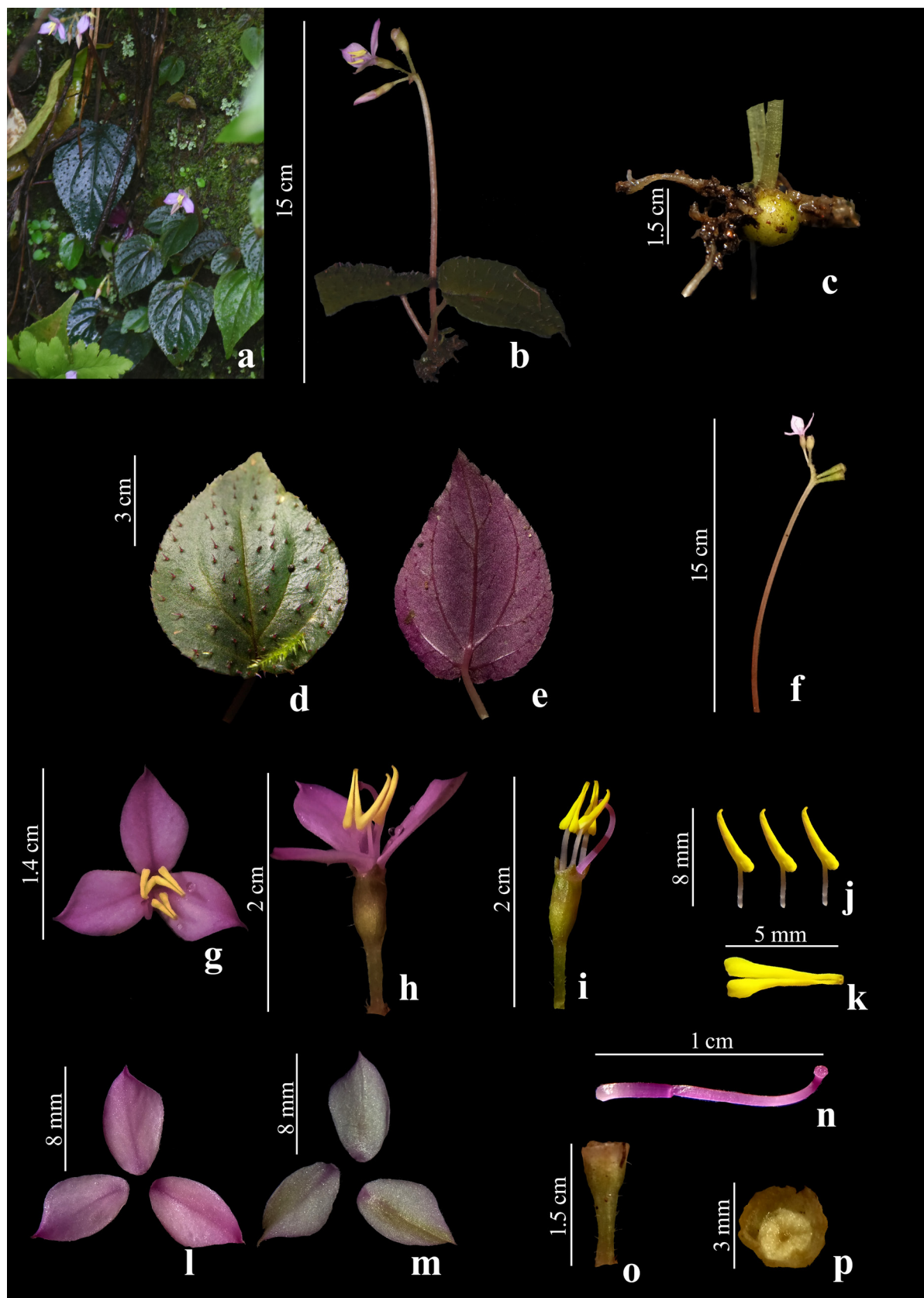


Image 1. *Sonerila bababudangiriensis* sp. nov.: a—habitat | b—habit | c—Caulescent tuber | d—leaf dorsal | e—leaf ventral | f—inflorescence | g—flower front view | h—flower side view | i—Hypanthium (Inc. Anther & Gynoecium) | j—stamens | k—anther | l—petal dorsal | m—petal ventral | n—gynoecium | o—fruit side view | & p—fruit front view. © Prashant Karadakatti & Shreyas Betageri.

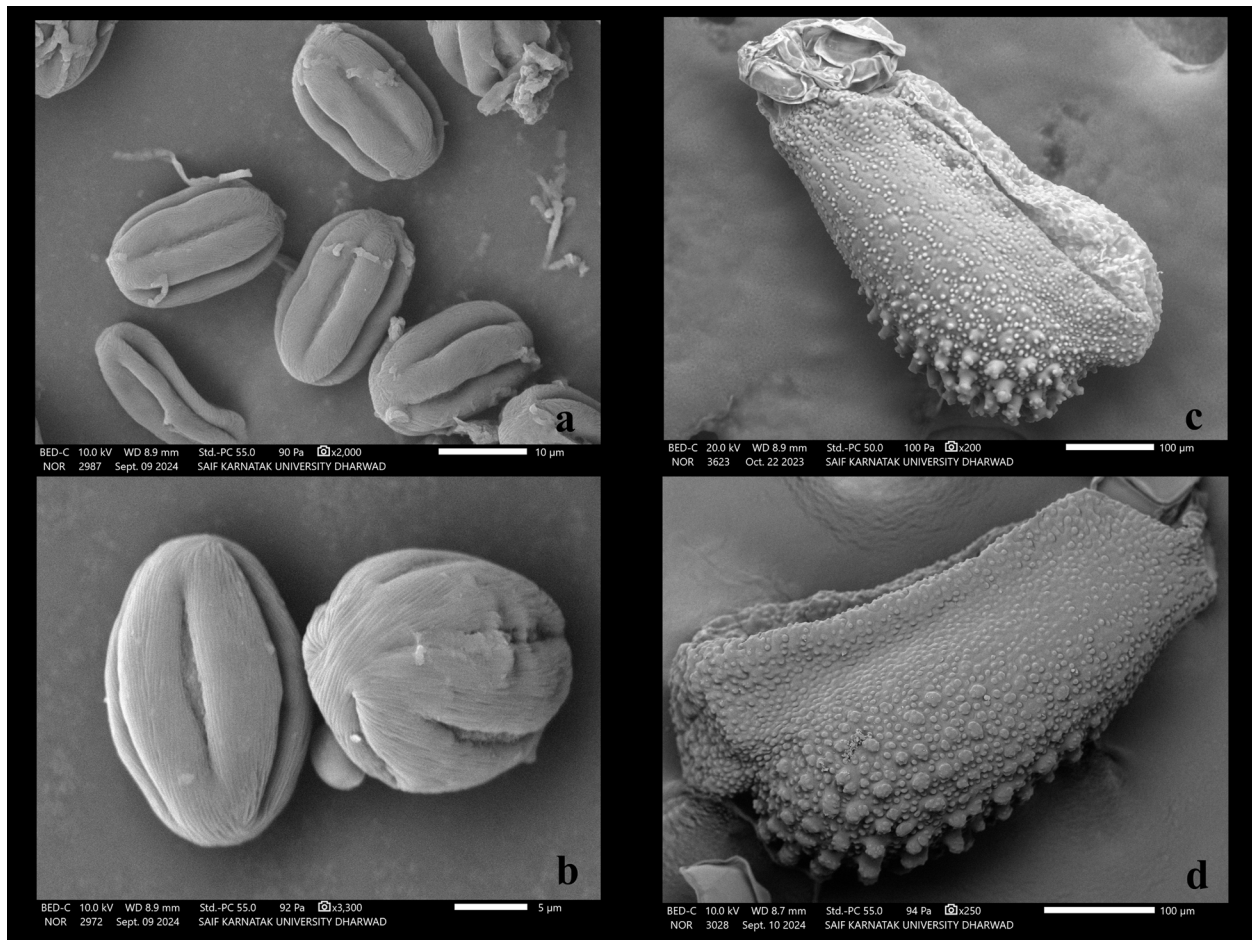


Image 2. a & c—Pollen & seed of *Sonerila wallichii* Benn. | b & d—Pollen and seed of *Sonerila bababudangiriensis* sp. nov. © Prashant Karadakatti & Shreyas Betageri

pale to dark pink at apex, glabrous, fruits capsule, pale green, 1.2–1.5 cm, gland-tipped trichomes, sometimes glabrous; seeds numerous, obovoid and pustulate.

Distribution: Type locality along roadside and slopes, near Bababudangiri, Chikkamagaluru District, Karnataka, India, 13.404, 75.738, 1,557 m elevation.

Habitat: Hill slopes, water stream, misty place, associated with *Sonerila wallichii* Benn, *Commelina indescense* E Barnes, *Osbeckia parvifolia* Arn, *Cyanotis* D Don, *Adiantum* L and *Selaginella* L.

Flowering and Fruiting: July to October.

Conservation Status: After several attempts to locate the species in the surrounding region, it was found in only one location—on the way to Bababudangiri, Chikkamagaluru District, Karnataka, India. A few individuals of the species are found at the type location within a 100 m range (water streams, road cuts, and

slopes). Hence, the species may be categorized as Data Deficient (DD) due to insufficient knowledge of its distribution (IUCN Standards and Petition Committee 2024).

MICRO MORPHOLOGY

Pollen morphology

The pollen grains of *Sonerila bababudangiriensis* sp. nov. and *S. wallichii* are studied as per the NPC classification (Erdtman 1969). The pollen grains of *S. bababudangiriensis* are quadrangular convex polar view, the acuminate obtuse in a rhombic shape at the equatorial view and the aperture heterocolpate, measures approximately $18\text{--}20 \times 13\text{--}15\text{ }\mu\text{m}$, small fibrous structures on the pollen surface, striate-reticulate. In *S. wallichii* Benn. pollen grains quadrangular convex polar view, non-angular truncate in elliptic shape, aperture heterocolpate, measures approximately $19\text{--}21 \times 11\text{--}13\text{ }\mu\text{m}$, fibrous structures on the pollen surface, striate-reticulate (Image 2).

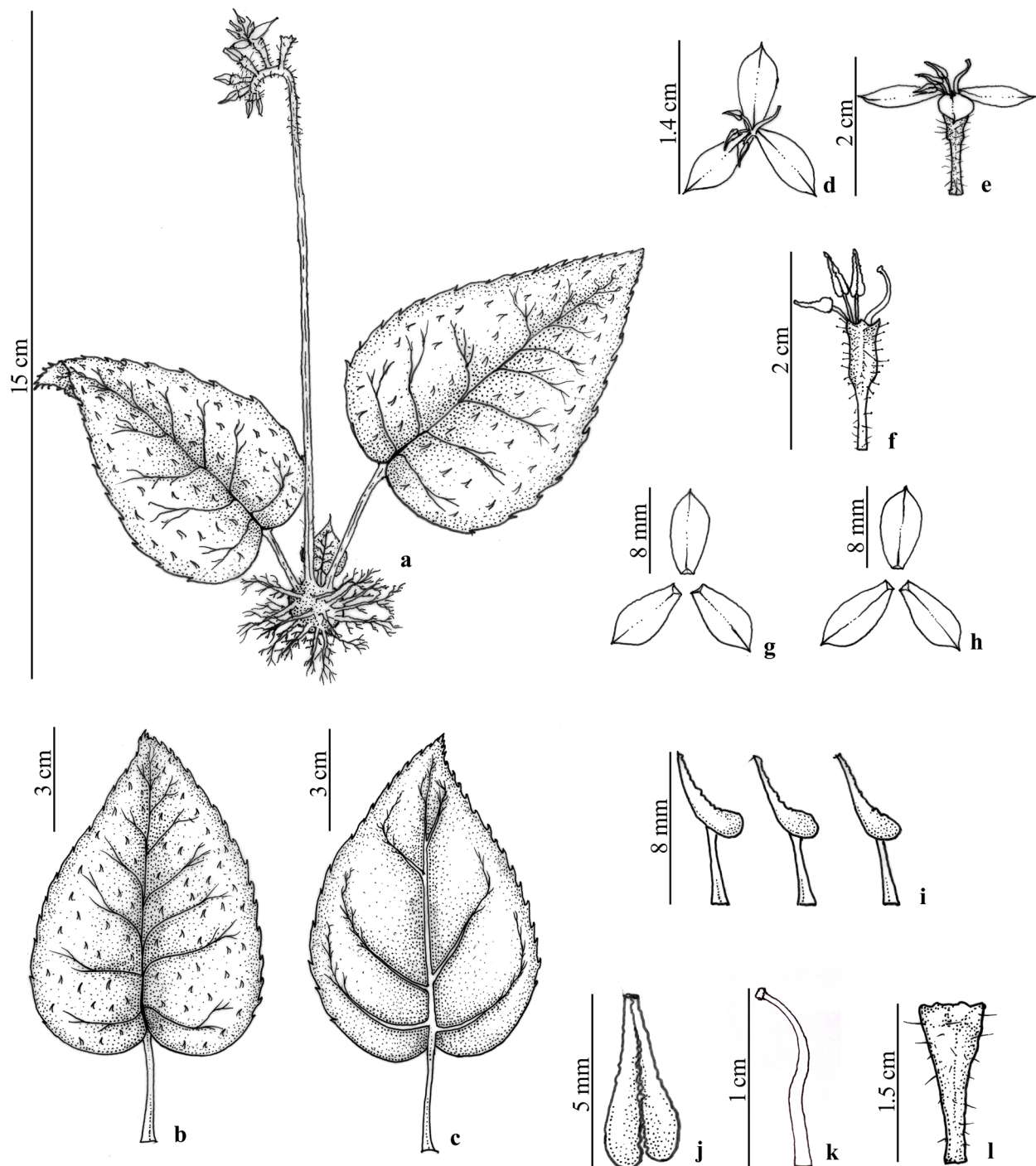


Figure 2. *Sonerila bababudangiriensis* sp. nov.: a—habit | b—leaf dorsal | c—leaf ventral | d—flower front view | e—flower side view | f—hypanthium | g—petal adaxial | h—petal abaxial | i—anthers | j—anther lobe | k—gynoecium | l—capsule. © Prashant Karadakatti.

Seed morphology

In *Sonerila bababudangiriensis* sp. nov. the seeds are numerous, ellipsoid, $500\text{--}580 \times 220\text{--}250 \mu\text{m}$, brown to dark brown, raphe remains out with dorsal surface tubercle, well-differentiated smaller and larger tubercles, from micropyle to dorsal shows small

pusticles with larger tubercles, large tubercles measure about $8\text{--}18 \times 10\text{--}20 \mu\text{m}$ in polar view, $5\text{--}10 \times 5\text{--}8 \mu\text{m}$ in side view, small tubercles measures about $1\text{--}3 \times 1\text{--}4 \mu\text{m}$. Less exposed testa cells, margins undulated with each other about $30\text{--}40 \times 10\text{--}15 \mu\text{m}$. In the *S. wallichii* seeds numerous, ellipsoid, $492\text{--}630 \times 211\text{--}225 \mu\text{m}$,

Table 1. Comparison of the morphological characteristics of *Sonerila bababudangiriensis* sp. nov. & *Sonerila wallichii*.

Parts	<i>Sonerila bababudangiriensis</i> sp. nov.	<i>Sonerila wallichii</i>
Tuber	Small tuber 0.5–1.5 cm diameter.	Non-tuberous.
Leaf	Lamina 3–5 cm wide, 5–8 cm long, dark green dorsal side with claret tinge spines or papillae scattered, measuring about 1–3 mm, claret at ventral side, glabrous, densely gland-dotted, toothed margins, serrate, leaf base slightly orbicular with equal base and cordate.	Parrot green 4–10 cm wide, 3–14 cm long, 4–6 nerved, four pairs from the base, 4–12 pairs from the midrib, sparsely gland-tipped trichomes.
Inflorescence	Only one inflorescence from each individual, unbranched, bostryx cyme, 1.5–3 cm long, 4–12 flowered	Two to three inflorescences from each individual, unbranched, scorpioid cyme, 2–5 from each habit, and 5–18 flowers.
Flower	1.5–1.8 cm, trimerous, pale pink	1.5–2 cm, trimerous, rarely tetramerous, moderate pink.
Peduncle	Quadrangular, 4–13 cm long claret tinge to pale green & glabrous.	Quadrangular, 5–18 cm long pale green to white at tip with gland-tipped trichomes.
Hypanthium	Angular and sparsely gland-tipped trichomes.	Angular, glandular hairs or trichomes.
Petals	Pale pink; 5–8 mm ovate-oblong & acuminate, glabrous, thickened.	Moderate pink to dark pink; 4–10 mm ovate-oblong & acuminate glandular hairs on abaxial midrib.
Anthers	Long acuminate, beaked, deeply cordate; longer than the filament.	Long oblong to acuminate, beaked deeply cordate, equal to the filament.

brown to dark brown, raphe overlapped or closed at dorsal and comprised tubercles on the surface with well-differentiated smaller and larger tubercles, at the dorsal side both pustules scattered lesser at micropyle, larger pustules are in a pyramid-like structure, measured about $10\text{--}22 \times 8\text{--}18 \mu\text{m}$ in polar view, $12\text{--}25 \times 5\text{--}15 \mu\text{m}$ in side view, smaller tubercles measured about $1\text{--}3 \times 1\text{--}5 \mu\text{m}$. Less exposed testa cells, margins undulated with each other $25\text{--}35 \times 12\text{--}14 \mu\text{m}$ (Image 2).

REFERENCES

- Bhattacharya, K., M.R. Majumdar & S.G. Bhattacharya (2006). *A Textbook of Palynology*. Bijay Publications, Kolkata, 352 pp.
- Cellinese, N. (1997). Notes on the systematics and biogeography of the *Sonerila* generic alliance (Melastomataceae) with a special focus on fruit characters. *Tropical Biodiversity* 4(1): 83–93.
- Erdtman, G. (1969). *Handbook of Palynology: Morphology–Taxonomy–Ecology: An Introduction to the Study of Pollen Grains and Spores*. København: Munksgaard Publication, Sweden, pp. 21–37. (Available at Thomas J. Bata Library, Trent University).
- Giri, G.S. & M.P. Nayar (1986). A new species of *Sonerila* (Melastomataceae) from India. *Journal of Japanese Botany* 61(11): 344–348.
- Hickey, L.J. (1973). Classification of the architecture of dicotyledonous leaves. *American Journal of Botany* 60(1): 17–33. <https://doi.org/10.1002/j.1537-2197.1973.tb10192.x>
- IUCN Standards and Petitions Committee (2024). Guidelines for Using the IUCN - Red List Categories and Criteria. Version 16. Prepared by the Standards and Petitions, Committee. Downloadable from <https://www.iucnredlist.org/documents/RedListGuidelines.pdf>. Accessed on 25 January 2024.
- Karakakatti, P. & S.B. Kakkalameli (2024). *Sonerila konkanensis* Resmi & Nampy (Melastomataceae)—an addition to the flora of Karnataka, India. *Journal of Threatened Taxa* 16(5): 25279–25282. <https://doi.org/10.11609/jott.8882.16.5.25279-25282>
- Penneys, D., F. Almeda, M. Reginato, F.A. Michelangeli, R. Goldenberg, P.W. Fritsch & R.D. Stone (2022). A new Melastomataceae classification informed by molecular phylogenetics and morphology, pp. 109–166. In: Goldenberg, R., F.A. Michelangeli & Frank Almeda (eds.). *Systematics, Evolution, and Ecology of Melastomataceae*. Springer, Cham., xxiv + 793 pp. https://doi.org/10.1007/978-3-030-99742-7_5
- Plants of the World Online (POWO) (2024). Kew Royal Botanic Garden. <https://powo.science.kew.org/> (Accessed 25 Jan 2025).
- Ravikumar, K., A.C. Tangavelou & A. Page (2021). *Seed Plants of Karnataka – A Concise Dictionary*. Foundation for revitalization of local health traditions trans-disciplinary university (FRLHT-TDU), Bengaluru. National Biodiversity Authority Chennai, 836 pp.
- Renner, S.S. (1993). *Phylogeny and classification of the Melastomataceae and Memecylaceae*. *Nordic Journal of Botany* 13(5): 519–540.
- Resmi, S., K.M. Manudev, C. Pramod & S. Nampy (2018). A new species of *Sonerila* (Melastomataceae: Sonerileae) from southern Western Ghats, India. *Phytotaxa* 333(2): 235–242. <https://doi.org/10.11646/phytotaxa.333.2.7>
- Resmi, S. & S. Nampy (2021). A new addition to the stoloniferous *Sonerila* (Sonerileae, Melastomataceae) from southern Western Ghats, India. *Brittonia* 73(2): 195–202. <https://doi.org/10.1007/s12228-021-09657-w>
- Saldanha, C.J. (1984). *Flora of Karnataka, Vol. 2*. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, Calcutta, 37–46 pp.
- Sanjappa, M. & A.N. Sringswara (2019). *Flora of Karnataka a checklist - Vol. 2*. Karnataka Biodiversity Board, 495–497 pp.
- Stevens, P.F. (2012). Angiosperm phylogeny website. <http://www.mobot.org/MOBOT/research/APweb/> Accessed on 15 January 2012.
- Ulloa, U.C., F. Almeda, R. Goldenberg, G. Kadereit, F.A. Michelangeli, D.S. Penneys, R.D. Stone & M.C. Veranso-Libalah (2022). Melastomataceae: Global diversity, distribution, and endemism, pp. 3–28. In: Goldenberg, R., F.A. Michelangeli, D.S. Penneys, R.D. Stone & M.C. Veranso-Libalah (eds.). *Systematics, Evolution, and Ecology of Melastomataceae*. Springer, Cham, xxiv + 793 pp. https://doi.org/10.1007/978-3-030-99742-7_1

Mr. Jatishwor Singh Irungbam, Biology Centre CAS, Branišovská, Czech Republic.
Dr. Ian J. Kitching, Natural History Museum, Cromwell Road, UK
Dr. George Mathew, Kerala Forest Research Institute, Peechi, India
Dr. John Noyes, Natural History Museum, London, UK
Dr. Albert G. Orr, Griffith University, Nathan, Australia
Dr. Sameer Padhye, Katholieke Universiteit Leuven, Belgium
Dr. Nancy van der Poorten, Toronto, Canada
Dr. Kareen Schnabel, NIWA, Wellington, New Zealand
Dr. R.M. Sharma, (Retd.) Scientist, Zoological Survey of India, Pune, India
Dr. Manju Siliwal, WILD, Coimbatore, Tamil Nadu, India
Dr. G.P. Sinha, Botanical Survey of India, Allahabad, India
Dr. K.A. Subramanian, Zoological Survey of India, New Alipore, Kolkata, India
Dr. P.M. Sureshan, Zoological Survey of India, Kozhikode, Kerala, India
Dr. R. Varatharajan, Manipur University, Imphal, Manipur, India
Dr. Eduard Vives, Museu de Ciències Naturals de Barcelona, Terrassa, Spain
Dr. James Young, Hong Kong Lepidopterists' Society, Hong Kong
Dr. R. Sundararaj, Institute of Wood Science & Technology, Bengaluru, India
Dr. M. Nithyanandan, Environmental Department, La Ala Al Kuwait Real Estate. Co. K.S.C., Kuwait
Dr. Himender Bharti, Punjabi University, Punjab, India
Mr. Purnendu Roy, London, UK
Dr. Saito Motoki, The Butterfly Society of Japan, Tokyo, Japan
Dr. Sanjay Sondhi, TITLI TRUST, Kalpavriksh, Dehradun, India
Dr. Nguyen Thi Phuong Lien, Vietnam Academy of Science and Technology, Hanoi, Vietnam
Dr. Nitin Kulkarni, Tropical Research Institute, Jabalpur, India
Dr. Robin Wen Jiang Ngiam, National Parks Board, Singapore
Dr. Lionel Monod, Natural History Museum of Geneva, Genève, Switzerland.
Dr. Asheesh Shivam, Nehru Gram Bharti University, Allahabad, India
Dr. Rosana Moreira da Rocha, Universidade Federal do Paraná, Curitiba, Brasil
Dr. Kurt R. Arnold, North Dakota State University, Saxony, Germany
Dr. James M. Carpenter, American Museum of Natural History, New York, USA
Dr. David M. Claborn, Missouri State University, Springfield, USA
Dr. Kareen Schnabel, Marine Biologist, Wellington, New Zealand
Dr. Amazonas Chagas Júnior, Universidade Federal de Mato Grosso, Cuiabá, Brasil
Mr. Monsoon Jyoti Gogoi, Assam University, Silchar, Assam, India
Dr. Heo Chong Chin, Universiti Teknologi MARA (UiTM), Selangor, Malaysia
Dr. R.J. Shiel, University of Adelaide, SA 5005, Australia
Dr. Siddharth Kulkarni, The George Washington University, Washington, USA
Dr. Priyadarsanan Dharma Rajan, ATREE, Bengaluru, India
Dr. Phil Alderslade, CSIRO Marine And Atmospheric Research, Hobart, Australia
Dr. John E.N. Veron, Coral Reef Research, Townsville, Australia
Dr. Daniel Whitmore, State Museum of Natural History Stuttgart, Rosenstein, Germany.
Dr. Yu-Feng Hsu, National Taiwan Normal University, Taipei City, Taiwan
Dr. Keith V. Wolfe, Antioch, California, USA
Dr. Siddharth Kulkarni, The Hormiga Lab, The George Washington University, Washington, D.C., USA
Dr. Tomas Ditrich, Faculty of Education, University of South Bohemia in Ceske Budejovice, Czech Republic
Dr. Mihaly Foldvari, Natural History Museum, University of Oslo, Norway
Dr. V.P. Uniyal, Wildlife Institute of India, Dehradun, Uttarakhand 248001, India
Dr. John D.D. Caleb, Zoological Survey of India, Kolkata, West Bengal, India
Dr. Priyadarsanan Dharma Rajan, Ashoka Trust for Research in Ecology and the Environment (ATREE), Royal Enclave, Bangalore, Karnataka, India

Fishes

Dr. Topiltzin Contreras MacBeath, Universidad Autónoma del estado de Morelos, México
Dr. Heok Hee Ng, National University of Singapore, Science Drive, Singapore
Dr. Rajeev Raghavan, St. Albert's College, Kochi, Kerala, India
Dr. Robert D. Sluka, Chiltern Gateway Project, A Rocha UK, Southall, Middlesex, UK
Dr. E. Vivekanandan, Central Marine Fisheries Research Institute, Chennai, India
Dr. Davor Zanella, University of Zagreb, Zagreb, Croatia
Dr. A. Biju Kumar, University of Kerala, Thiruvananthapuram, Kerala, India
Dr. Akhilesh K.V., ICAR-Central Marine Fisheries Research Institute, Mumbai Research Centre, Mumbai, Maharashtra, India
Dr. J.A. Johnson, Wildlife Institute of India, Dehradun, Uttarakhand, India
Dr. R. Ravinesh, Gujarat Institute of Desert Ecology, Gujarat, India

Amphibians

Dr. Sushil K. Dutta, Indian Institute of Science, Bengaluru, Karnataka, India
Dr. Annemarie Ohler, Muséum national d'Histoire naturelle, Paris, France

Reptiles

Dr. Gernot Vogel, Heidelberg, Germany
Dr. Raju Vyas, Vadodara, Gujarat, India
Dr. Pritpal S. Soorae, Environment Agency, Abu Dubai, UAE.
Prof. Dr. Wayne J. Fuller, Near East University, Mersin, Turkey
Prof. Chandrashekher U. Rivonker, Goa University, Taleigao Plateau, Goa. India
Dr. S.R. Ganesh, Chennai Snake Park, Chennai, Tamil Nadu, India
Dr. Himansu Sekhar Das, Terrestrial & Marine Biodiversity, Abu Dhabi, UAE

Birds

Dr. Hem Sagar Baral, Charles Sturt University, NSW Australia
Mr. H. Byju, Coimbatore, Tamil Nadu, India
Dr. Chris Bowden, Royal Society for the Protection of Birds, Sandy, UK
Dr. Priya Davidar, Pondicherry University, Kalapet, Puducherry, India
Dr. J.W. Duckworth, IUCN SSC, Bath, UK
Dr. Rajah Jayapal, SAGON, Coimbatore, Tamil Nadu, India
Dr. Rajiv S. Kalsi, M.L.N. College, Yamuna Nagar, Haryana, India
Dr. V. Santharam, Rishi Valley Education Centre, Chittoor Dt., Andhra Pradesh, India
Dr. S. Balachandran, Bombay Natural History Society, Mumbai, India
Mr. J. Praveen, Bengaluru, India
Dr. C. Srinivasulu, Osmania University, Hyderabad, India
Dr. K.S. Gopi Sundar, International Crane Foundation, Baraboo, USA
Dr. Gombobaatar Sunde, Professor of Ornithology, Ulaanbaatar, Mongolia
Prof. Reuven Yosef, International Birding & Research Centre, Eilat, Israel
Dr. Taej Mundkur, Wetlands International, Wageningen, The Netherlands
Dr. Carol Inskipp, Bishop Auckland Co., Durham, UK
Dr. Tim Inskipp, Bishop Auckland Co., Durham, UK
Dr. V. Gokula, National College, Tiruchirappalli, Tamil Nadu, India
Dr. Arkady Lelej, Russian Academy of Sciences, Vladivostok, Russia
Dr. Simon Dowell, Science Director, Chester Zoo, UK
Dr. Mário Gabriel Santiago dos Santos, Universidade de Trás-os-Montes e Alto Douro, Quinta de Prados, Vila Real, Portugal
Dr. Grant Connette, Smithsonian Institution, Royal, VA, USA
Dr. P.A. Azeez, Coimbatore, Tamil Nadu, India

Mammals

Dr. Giovanni Amori, CNR - Institute of Ecosystem Studies, Rome, Italy
Dr. Anwaruddin Chowdhury, Guwahati, India
Dr. David Mallon, Zoological Society of London, UK
Dr. Shomita Mukherjee, SAGON, Coimbatore, Tamil Nadu, India
Dr. Angie Appel, Wild Cat Network, Germany
Dr. P.O. Nameer, Kerala Agricultural University, Thrissur, Kerala, India
Dr. Ian Redmond, UNEP Convention on Migratory Species, Lansdown, UK
Dr. Heidi S. Riddle, Riddle's Elephant and Wildlife Sanctuary, Arkansas, USA
Dr. Karin Schwartz, George Mason University, Fairfax, Virginia.
Dr. Lala A.K. Singh, Bhubaneswar, Orissa, India
Dr. Mewa Singh, Mysore University, Mysore, India
Dr. Paul Racey, University of Exeter, Devon, UK
Dr. Honnavalli N. Kumara, SAGON, Anaikatty P.O., Coimbatore, Tamil Nadu, India
Dr. Nishith Dharaiya, HNG University, Patan, Gujarat, India
Dr. Spartaco Gippoliti, Socio Onorario Società Italiana per la Storia della Fauna "Giuseppe Altobello", Rome, Italy
Dr. Justus Joshua, Green Future Foundation, Tiruchirappalli, Tamil Nadu, India
Dr. H. Raghuram, The American College, Madurai, Tamil Nadu, India
Dr. Paul Bates, Harison Institute, Kent, UK
Dr. Jim Sanderson, Small Wild Cat Conservation Foundation, Hartford, USA
Dr. Dan Challender, University of Kent, Canterbury, UK
Dr. David Mallon, Manchester Metropolitan University, Derbyshire, UK
Dr. Brian L. Cypher, California State University-Stanislaus, Bakersfield, CA
Dr. S.S. Talmale, Zoological Survey of India, Pune, Maharashtra, India
Prof. Karan Bahadur Shah, Budhanilakantha Municipality, Kathmandu, Nepal
Dr. Susan Cheyne, Borneo Nature Foundation International, Palangkaraja, Indonesia
Dr. Hemanta Kafley, Wildlife Sciences, Tarleton State University, Texas, USA

Other Disciplines

Dr. Aniruddha Belsare, Columbia MO 65203, USA (Veterinary)
Dr. Mandar S. Paingankar, University of Pune, Pune, Maharashtra, India (Molecular)
Dr. Jack Tordoff, Critical Ecosystem Partnership Fund, Arlington, USA (Communities)
Dr. Ulrike Streicher, University of Oregon, Eugene, USA (Veterinary)
Dr. Hari Balasubramanian, EcoAdvisors, Nova Scotia, Canada (Communities)
Dr. Rayanna Hellem Santos Bezerra, Universidade Federal de Sergipe, São Cristóvão, Brazil
Dr. Jamie R. Wood, Landcare Research, Canterbury, New Zealand
Dr. Wendy Collinson-Jonker, Endangered Wildlife Trust, Gauteng, South Africa
Dr. Rajeshkumar G. Jani, Anand Agricultural University, Anand, Gujarat, India
Dr. O.N. Tiwari, Senior Scientist, ICAR-Indian Agricultural Research Institute (IARI), New Delhi, India
Dr. L.D. Singla, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, India
Dr. Rupika S. Rajakaruna, University of Peradeniya, Peradeniya, Sri Lanka
Dr. Bahar Baviskar, Wild-CER, Nagpur, Maharashtra 440013, India

Reviewers 2021–2023

Due to pausity of space, the list of reviewers for 2021–2023 is available online.

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.

Print copies of the Journal are available at cost. Write to:
The Managing Editor, JoTT,
c/o Wildlife Information Liaison Development Society,
3A2 Varadarajulu Nagar, FCI Road, Ganapathy, Coimbatore,
Tamil Nadu 641006, India
ravi@threatenedtaxa.org & ravi@zooreach.org

Journal of Threatened Taxa is indexed/abstracted in Bibliography of Systematic Mycology, Biological Abstracts, BIOSIS Previews, CAB Abstracts, EBSCO, Google Scholar, Index Copernicus, Index Fungorum, JournalSeek, National Academy of Agricultural Sciences, NewJour, OCLC WorldCat, SCOPUS, Stanford University Libraries, Virtual Library of Biology, Zoological Records.

NAAS rating (India) 5.64



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)

April 2025 | Vol. 17 | No. 4 | Pages: 26763–26938

Date of Publication: 26 April 2025 (Online & Print)

DOI: 10.11609/jott.2025.17.4.26763-26938

www.threatenedtaxa.org

Articles

Biodiversity in Garh Panchkot and surroundings (Purulia, West Bengal) of residential and migratory land vertebrates with special reference to endangered species

– Amrita Panja, Biplab Kahar & Sujoy Chattaraj, Pp. 26763–26779

Evaluating wildlife activity and corridor functionality: a study of underpasses in and around Rajaji National Park, India

– Nishant Verma, Saket Badola & Samrat Mondol, Pp. 26780–26788

Avifaunal diversity and conservation status of waterbirds in Pillaimadam Lagoon, Palk Bay, India

– H. Byju, H. Maitreyi, N. Raveendran, S. Ravichandran & Reshmi Vijayan, Pp. 26789–26802

Comments on the systematics and morphology of *Smithophis bicolor* (Blyth, 1855) (Reptilia: Squamata: Natricidae) based on topotypical specimens from Meghalaya, India

– Jayaditya Purkayastha, Bipin Meetei Asem, Hmar Tlawmte Lalremsanga, Madhurima Das, Holiness Warjri, Goldenstar Thongni & Sanath Chandra Bohra, Pp. 26803–26813

Diversity and distribution of fish in rivers Chinnar and Thenar and their tributary, southern Western Ghats, Tamil Nadu, India

– K. Mahesh Kumar, T. Ajayla Karthika & K. Anvar, Pp. 26814–26823

Diversity and habitat preferences of butterflies (Insecta: Lepidoptera) in Dzongu, Mangan, Sikkim, India

– Sonam Wangchuk Lepcha & Monish Kumar Thapa, Pp. 26824–26849

Seasonal study on succession of forensically significant entomofauna under indoor environment in Punjab, India

– Pawandeep Kaur & Madhu Bala, Pp. 26850–26856

Communications

First photographic record of ferret badger *Melogale* sp. (Mammalia: Carnivora: Mustelidae) from the state of Tripura, India

– Omkar Patil, Ashutosh Joshi & Amey Parkar, Pp. 26857–26863

An update on the status of some Data Deficient bat species from India

– Uttam Saikia, Manuel Ruedi & Rohit Chakravarty, Pp. 26864–26871

Distribution, perception, and conservation challenges of endemic Madras Hedgehog *Paraechinus nudiventris* in Tenkasi District, Tamil Nadu: insights from questionnaire surveys

– Brawin Kumar & Abinash Muthaiyan, Pp. 26872–26878

Notes on the interesting species *Tacca leontopetaloides* (L.) Kuntze

– Sk. Md. Abu Imam Saadi, Meheeb Sarwar Hossain, Debasis Bhunia, Sk. Rasidul Islam, Sayantan Tripathi, Sanjit Sinha & Amal Kumar Mondal, Pp. 26879–26886

Extended distribution of the rare basidiolichen *Sulzbacheromyces yunnanensis* (Lichenized Basidiomycota) from Mizoram, India

– V.L. Thachunglura, Prabhat Kumar Rai, Zohmangaiha Chawngthu, Lallawmkima Bochung, P.C. Vanlalhluna & John Zothanzama, Pp. 26887–26892

Short Communications

First photographic record of a Leopard Cat *Prionailurus bengalensis* (Kerr, 1792) (Mammalia: Carnivora: Felidae) in central India

– Prabhu Nath Shukla, Bilal Habib, Virendra Kumar Mishra, Sumedh Lomesh Bobade, Eshaan Chaitanya Rao & Kanishka, Pp. 26893–26897

New record of Mysore Slender Loris *Loris lydekkerianus* near Puducherry, India

– Shanmugam Mani, P. Aravind Aathi, K. Sivakumar, Aurosyll Bystrom & D. Saravanan, Pp. 26898–26902

The brachypterous endemic genus *Ardistomopsis* (Coleoptera: Carabidae: Panagaeinae) of the Indian subcontinent: first report of *Ardistomopsis batesi* Straneo & Ball, 1989 and *Ardistomopsis marginicollis* (Schaum, 1864) (Coleoptera: Carabidae: Panagaeinae) from the Western Ghats and the biogeographical significance

– V.A. Jithmon, M. Divya & Thomas K. Sabu, Pp. 26903–26907

First report of *Jauravia assamensis* Kapur, 1961 (Coleoptera: Coccinellidae) from West Bengal, India

– Tamoghno Majumder, Aloy Adak & Kusal Roy, Pp. 26908–26911

First record of *Hycleus marcipoli* Pan & Bologna, 2014 (Coleoptera: Meloidae) as a pest of Common Beans in Kashmir Himalaya, India

– Farhana Shafi & Altaf Hussain Mir, Pp. 26912–26916

***Sonerila bababudangiriensis* (Melastomataceae), a new species of herb from the Western Ghats of India**

– Prashant Karadakatti & Siddappa B. Kakkalameli, Pp. 26917–26922

Rediscovery of *Phallus aurantiacus* Mont. from India and new distribution record from Odisha, India

– Malay Prithwiraj Sahoo, Supriya Sahu, Samarendra Narayan Mallick, Prabhat Kumar Das, Yasaswinee Rout, Subrat Dalabehera, Sitaram Prasad Panda & Vinaykumar Hallur, Pp. 26923–26927

Occurrence of a rare desmid *Tetmemorus laevis* Ralfs ex Ralfs from Yumthang Valley, northern Sikkim with a note on the genus in India

– Debjyoti Das, Jay Mal & Jai Prakash Keshri, Pp. 26928–26931

Notes

***Ophiorrhiza japonica* Blume (Rubiaceae): a new record for India**

– Ngasheppam Malemnganbi Chanu, Peimichon Langkan, Thongam Nourenpai Khanganba & Thongam Biseshwori, Pp. 26932–26935

***Isodon neorensis* Ranjan, G. Krishna & Anant Kumar (Lamiaceae): a new record for Sikkim Himalaya, India**

– Pramod Rai, Pp. 26936–26938

Publisher & Host



Threatened Taxa