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Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

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

NOTE

A REASSESSMENT AND LECTOTYPIIFICATION OF THE NAME *STRIGA MASURIA* (BUCH.-HAM. EX BENTH.) BENTH. (OROBANCHACEAE) AND ITS COLLECTION FROM THE WESTERN GHATS OF INDIA

M. Omalsree & V.K. Sreenivas

26 August 2018 | Vol. 10 | No. 9 | Pages: 12294–12297
10.11609/jott.4239.10.9.12294-12297



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

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The genus *Striga* Loureiro belongs to the family Orobanchaceae and comprises about 43 species (Omalsree et al. 2015) with the highest diversity in tropical Africa (Mohamed et al. 2001; Fischer et al. 2011). Out of this, nine species have been recorded so far from India, including the recent addition of three new species, viz. *Striga kamalii* Omalsree et al. (2015: 166), *S. indica* Prabhu et al. (in Jayanthi et al. 2013: 284) and *S. scottiana* Jeeva et al. (2012: 79). As a part of the ongoing taxonomic revision on the genus *Striga* in India, the authors collected one unknown species of *Striga* from the Chennai region of Tamil Nadu State in 2015. Further studies based on relevant literature and comparison with type specimens confirmed its identity as *Striga masuria* (Buch.-Ham. ex Benth.) Benth. *Striga masuria* was described by Benth. based on two collections from the Morang Hills of Nepal (Hamilton 1810) and Prome of Myanmar (Wallich 1826). Later, Hooker (1884) reported this species for India based on Shutter's collection in 1880 from the Guindy region of Tamil Nadu. Since then, there have been no reports about this species from any part of India. The present recollection of this taxon from Chennai is the collection of the plant after 135 years (Images 1, 3).

The detailed taxonomic studies based on fresh specimens revealed that the character of the plant shows close similarities with its allied species in the section *Polylepurae*, *S. angustifolia* (D. Don) Saldanha by means of the pubescent nature of the plant, white

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corolla lobes and 15-ribbed calyx lobes. The only differences observed are the length of the plant, the loosely arranged flowers and closely positioned ribs on calyx lobes. These characters are not strong enough to retain its species status and are reduced as a variety under *S. angustifolia*. During the present study, it was observed that no type has been designated to this taxon and the lectotype are also designated here according to Art. 9.3 of the ICN, Shenzhen code (Turland et al. 2018).

***Striga angustifolia* (D. Don) Saldanha var. *masuria* (Buch.-Ham. ex Benth.) Omalsree & V.K. Sreenivas stat. nov. (Image 1)**

Striga masuria (Buch.-Ham. ex Benth.) Benth. (1838: 364) syn. nov.

Buchnera masuria Buchanan-Hamilton ex Benth. (1836: 41)

DOI: <http://doi.org/10.11609/jott.4239.10.9.12294-12297>

Editor: Mandar N. Datar, Agharkar Research Institute, Pune, India.

Date of publication: 26 August 2018 (online & print)

Manuscript details: Ms # 4239 | Received 08 May 2018 | Final received 26 July 2018 | Finally accepted 05 August 2018

Citation: Omalsree, M. & V.K. Sreenivas (2018). A reassessment and lectotypification of the name *Striga masuria* (Buch.-Ham. ex Benth.) Benth. (Orobanchaceae) and its collection from the Western Ghats of India. *Journal of Threatened Taxa* 10(9): 12294–12297; <http://doi.org/10.11609/jott.4239.10.9.12294-12297>

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Funding: None.

Competing interests: The authors declare no competing interests.

Acknowledgements: Authors are grateful to the personnel of the following herbaria: CAL, MH, K and E for permitting to do this research; Dr. K.A. Sujana, M.C. Shameer, Dr. V.K. Suresh, Sojan Jose for their support and two unknown reviewers for their help to improve the manuscript.

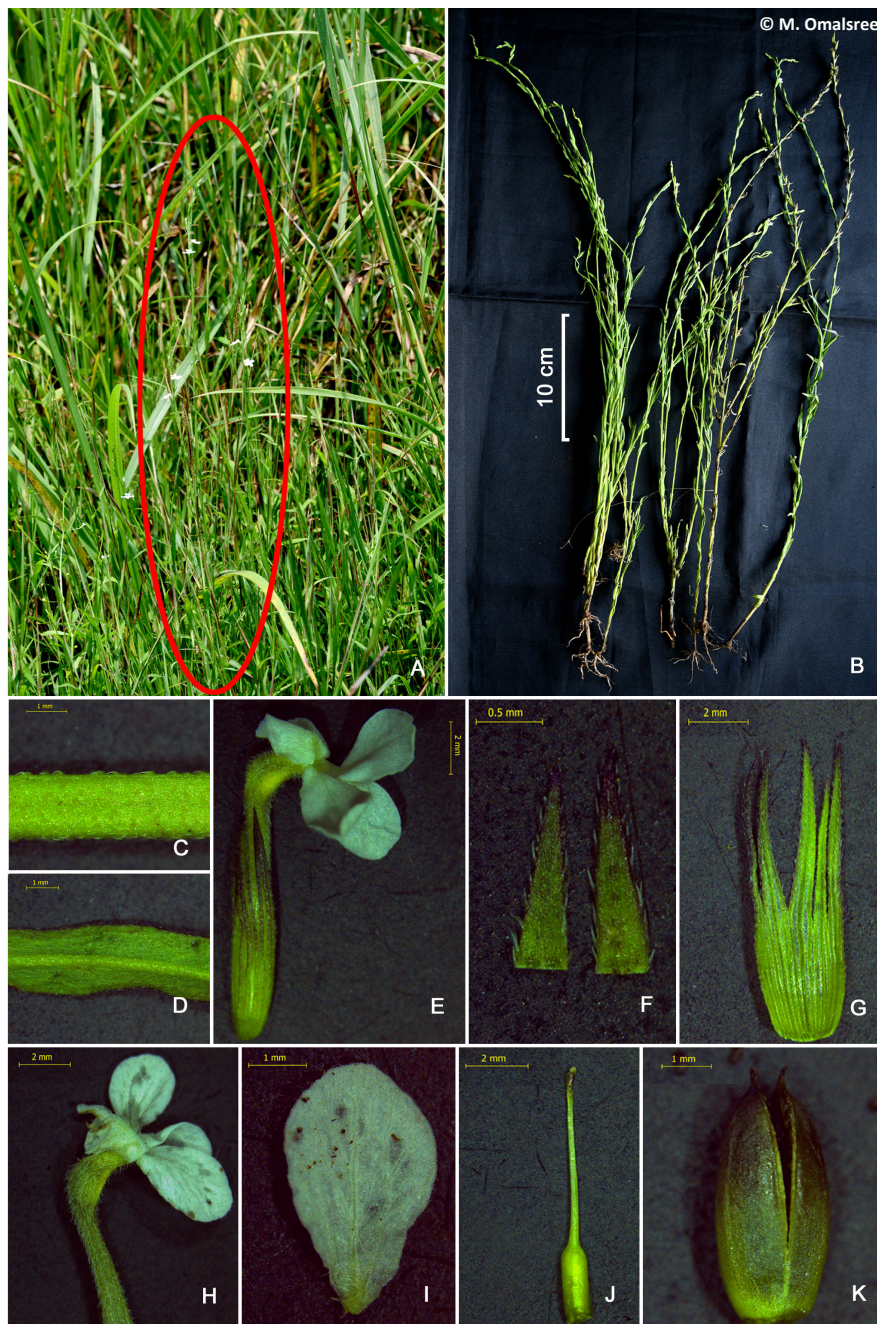


Image 1. *Striga angustifolia* (D. Don) Saldanha var. *masuria* (Buch.-Ham. ex Benth.) Omalsree & V.K. Sreenivas stat. nov.

A - Natural habitat; B - Habit;
C - portion of Stem; D - portion of Leaf;
E - Flower; F - Bracteoles; G - Calyx;
H - Corolla lobe with tube;
I - Single corolla lobe; J - Gynoeceium;
K - Fruit.

Buchnera wallichii Benth. (in Wallich Cat., 3876)

Type (lectotype, designated here): Nepal, Morang hills, 28.vii.1810, Francis (Buchanan) Hamilton, 1419 (E barcode: E00273651 [digital images!]; isoelectotypes, K000899664, K001117506 [digital images!]).

Residual Syntypes: Myanmar, Prome, 09.x.1826, N. Wallich, 1161 (K barcode: K001117505, K000899663, E00273649 [digital images!]).

Erect annual, chlorophyllous herbs, 32–68 cm tall. Stem densely hispid, quadrangular, green, branched from middle to apex. Leaves opposite at base, alternate

towards apex, sessile, 12–40 × 1–4 mm, linear-lanceolate, acute at apex, cuneate at base, hairy on both surfaces especially on mid-rib; margins ciliate with strigose hairs; mid-rib prominent. Inflorescence a raceme, terminal or from axils of upper leaves, 15–45 cm long. Rachis angular, strigose hairy. Flowers zygomorphic, sessile, hypogynous, lax, alternate, 22–34 per inflorescence. Bract 1, 2.6–2.9 mm long, linear-lanceolate, hairy. Bracteoles 2, 1.8–2.1 mm long, linear-lanceolate, hairy. Calyx tubular, 15-ribbed; ribs distantly arranged and ending upto the teeth; lobes 5, 2.4–2.8 mm long, linear-

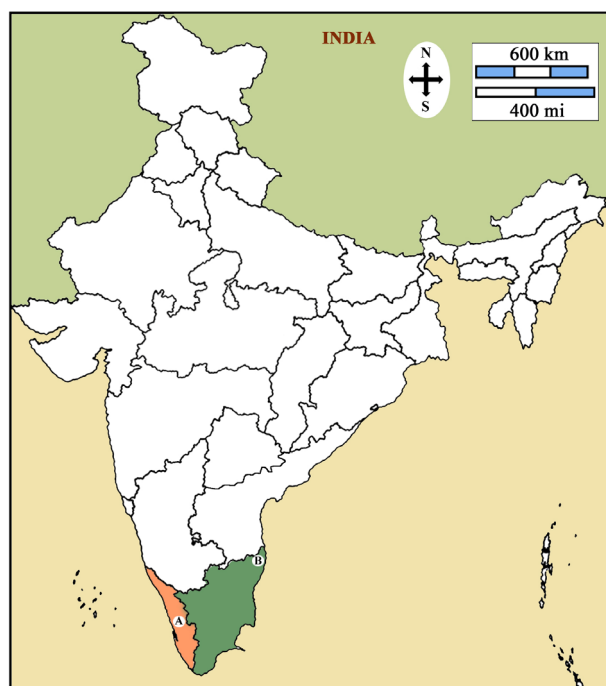


Image 3. Geographical distribution of *S. angustifolia* var. *masuria* in India. A - Kodikuthimala, Malappuram, Kerala; B - Guindy National Park, Chennai, Tamil Nadu.

lanceolate, hairy, green or with a brownish tinge. Corolla bilabiate; tube 8.8–9.8 mm long, prominently curved above the middle, greenish; lobes creamy-white, 3.8–4.4 mm long, broadly obovate, pubescent without, glabrous within; throat 4–4.2 mm long, hairy. Stamens 4, included, didynamous; filaments 1.5–3.2 mm long, attached to the distal end of the corolla tube; anthers 1-celled. Ovary superior, 2-celled, 2–2.2 mm long, oblong to ellipsoid, glabrous; ovules many, axile; style 4.8 mm long, white, brown at apex, glabrous; stigma brown. Fruit 5.5 mm long, ellipsoid, beaked. Seeds numerous, 0.3–0.4 mm long, ellipsoid with parallel striations, glabrous.

Phenology: July–November.

Distribution: In India, the plant is narrowly endemic to Kerala and Tamil Nadu states, the southern part of the Western Ghats (Image 2).

Nomenclatural notes: Hamilton proposed the name *Buchnera masuria* based on his own collections from Morang mountains on 28 July 1810. Subsequently, Benthham proposed the name *B. wallichii* based on Wallich's collections from Prome of Myanmar on 09 October 1826. Both names are mentioned only in Wallich's catalogue numbers 3877 and 3876 respectively without giving any additional information such as description of the plant (nomen nudum). Later Benthham (1836) validated the name *Buchnera masuria* Ham.

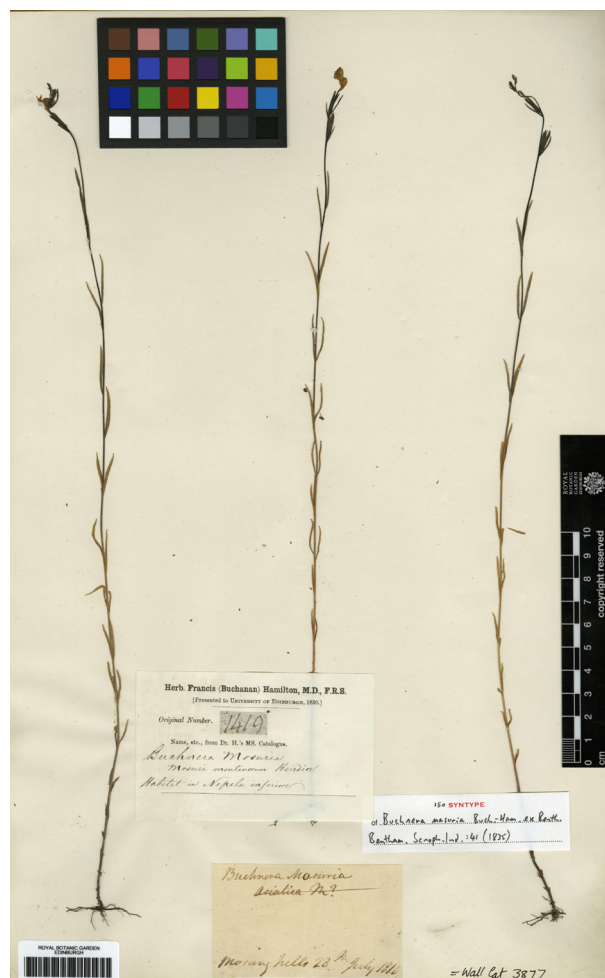


Image 3. Lectotype designated during the study [E barcode E00273651 [digital images]].

and synonymized the name *B. wallichii* Benth. under *B. masuria*. In that protologue, Benthham mentioned two collections, one by Hamilton for *B. masuria* (mountains of Morang, Nepal) and the latter by Wallich for *B. wallichii* (Prome, Burma). During the study, we have traced six specimens, which represent duplicates from a heterogenous collection, four specimens at K and two specimens at E. All the sheets are well preserved and bear flowers. We found three specimens each from both the localities which were deposited two at K and one at E. According to Art. 9.3 of the ICN, Shenzhen code (Turland et al. 2018), the specimen kept in E (1419, E barcode E00273651 [digital images!]) fits the description, and is preserved very well with collection number, locality and collector name, which is considered as the best choice and designated here as the lectotype (Image 3).

Habitat and biotic association: *Striga masuria* collected from two localities, viz., near Guindy forest

regions of Tamil Nadu and Kodikuthimala Hills of Kerala. We have identified two host species from Guindy region viz. *Ischaemum rangacharianum* C.E.C. Fisch. and *Paspalum scrobiculatum* L. and four from Kodikuthimala region viz. *Ischaemum rangacharianum* C.E.C. Fisch., *I. tumidum* Stapf ex Bor var. *calicutensis* (Sreek., V.J. Nair & N.C. Nair) R. Kr. Singh & P.S.N. Rao, *Arundinella mesophylla* Nees ex Steud. and *Pennisetum polystachyon* (L.) Schult.

Additional Specimens examined: OM-605 (MH), 12.ix.2015, India: Tamil Nadu: Chennai, Way to Guindy National Park, coll. M. Omalsree; OM-627 (MH), 28.x.2017, Kerala: Malappuram, Kodikuthimala, coll. Omalsree M; OM-629 (MH), 17.xi.2017, Kerala: Malappuram, Kodikuthimala, coll. M. Omalsree.

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

August 2018 | Vol. 10 | No. 9 | Pages: 12147–12298

Date of Publication: 26 August 2018 (Online & Print)

DOI: 10.11609/jott.2018.10.9.12147-12298

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-- Achyuthan N. Srikanthan, Gandla Chethan Kumar, Aishwarya J. Urs & Sumaithangi Rajagopalan Ganesh, Pp. 12147–12162

Communications

Foraging and roosting ecology of the Lesser Dog-faced Fruit Bat *Cynopterus brachyotis* (Mammalia: Chiroptera: Pteropodidae) in southern India

-- T. Karuppudurai & K. Sripathi, Pp. 12163–12172

Diversity and status of avifauna in man-made sacred ponds of Kurukshetra, India

-- Parmesh Kumar & Archana Sharma, Pp. 12173–12193

Diversity and distribution of freshwater turtles (Reptilia: Testudines) in Goa, India

-- Trupti D. Jadhav, Nitin S. Sawant & Soorambail K. Shyama, Pp. 12194–12202

Breeding behaviour of the Coromandel Damselfly *Ceriatagris coromandelianus* (Fabricius) (Zygoptera: Coenagrionidae) in central India: copulation

-- Nilesh R. Thakkar, Payal R. Verma & Raymond J. Andrew, Pp. 12203–12209

The status assessment of *Corynandra viscosa* subsp. *nagarjunakondensis* (Magnoliopsida: Cleomaceae), endemic to Nagarjunakonda, Andhra Pradesh, India

-- Veeravarapu Hanumantha Rao, Vaidyula Vasudeva Rao, Anuti Baleeshwar Reddy & Vatsavaya Satyanarayana Raju, Pp. 12210–12217

Short Communications

New records of termites (Blattodea: Termitidae: Syntermitinae) from Colombia

-- Olga Patricia Pinzón & Daniel Castro, Pp. 12218–12225

New reports of thrips (Thysanoptera: Terebrantia: Thripidae) from India

-- R.R. Rachana & R. Varatharajan, Pp. 12226–12229

New records of earthworm fauna (Oligochaeta: Glossoscolecidae and Megascolecidae) collected from Satkosia-Baisipalli Wildlife Sanctuary of Odisha, India

-- Rinku Goswami, Pp. 12230–12234

Diversity and endemism of butterflies of montane forests of Eravikulam National Park in the Western Ghats, India

-- E.R. Sreekumar, S. Nikhil, K.G. Ajay & P.O. Nameer, Pp. 12235–12246

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