Building evidence for conservation globally for
25 years

Silver Jubilee Issue
Extended distribution of *Clematis wightiana* Wall. (Ranunculaceae) in the Indian State of Arunachal Pradesh – a hitherto endemic species of the Western Ghats, India

Debasmita Dutta Pramanick & Manas Bhaumik

The genus *Clematis* L. belongs to the family Ranunculaceae, distributed throughout the world, specifically in temperate and subtropical regions of the North Hemisphere, and comprises c. 280–350 species globally (Tamura 1987, 1995; Wang & Li 2005). In India, the genus comprises 49 taxa viz. 42 species, one subspecies, and six varieties (Mao & Dash 2020) of which 13 taxa are endemic to India. From a taxonomic point of view, the genus is the most difficult one in the family Ranunculaceae, and has been treated variously from time to time. De Candolle (1818), in his revisionary study, treated 84 taxa of the genus *Clematis* L., into four (04) Sections. Spach (1839) classified the genus into three (03) Sections. In 1888, Prantl proposed a new sub-sectional classification of the genus which was later supported by Schneider (1906), Rehder & Wilson (1913), Handel-Mazzetti (1939), and Rehder (1940). In 1950–1967, Tamura made a comprehensive study of the genus *Clematis* L. which was based on Prantl’s framework. However, after 20 years, in his revised system of classification (1987), Tamura introduced a new character, i.e., phyllotaxy of seedling leaves and proposed a subgeneric classification of the genus. This treatment was later followed by Snoeijer (1992) and Grey-Wilson (2000) with few modifications. However, Johnson (1997, 2001), in his recent revisionary studies, did not accept the newer sub-generic classification of the genus *Clematis* L. of Tamura and rather he was fond of his earlier classification of this genus with 07 subsections of the section *Clematis* L. (Wang 2004).

*Clematis wightiana* Wall. belongs to the family Ranunculaceae, and has been reported as an endemic to the Western Ghats in India. A thorough review of the literature along with a meticulous study of herbarium specimens has indicated the occurrence of this species from Karnataka (Saldanha 1984), Kerala (Daniel 2005), Maharashtra (Cooke 1958; Singh & Karthikeyan 2000), and Tamil Nadu (Nair & Henry 1983). Further consultation of herbarium specimens deposited at MH, RHT, TBG, and appraisal of relevant literature (Hook.f. & Thomson 1872) was done for authenticating the distribution of the species in the Western Ghats. As part of the Action Plan Project, entitled ‘Flora of West Siang District, Arunachal Pradesh’, extensive field trips were carried out during 2010–2013 to different areas of West Siang district of Arunachal Pradesh during which
an interesting species of the family Ranunculaceae was collected from the villages of Mechuka (28.60027N, 94.13444E), Rego (28.53456N, 94.21392E), near Tato (28.52798N, 94.37317E) and way from Rego to Tato (27.79944N, 94.07472E). A total of 12–15 smaller patches were noticed from each locality which was part of a scattered population. The identification of the species was confirmed by consultation of protologue, authentic literature, and type specimen. During the consultation of Ranunculaceae specimens in ASSAM herbarium, two (2) similar collections of G. Panigrahi 15601 & 6636 and one (01) collection of D.B. Deb 30844, collected from Kameng District, Arunachal Pradesh, and Mizoram respectively, identified as *Clematis wightiana*, were examined. Based on Deb’s collection, the species was included in the Flora of Mizoram (Singh 2002), but unfortunately was overlooked in any of the published flora of Arunachal Pradesh. However, until the discovery of *Clematis wightiana* Wall. from the state of Arunachal Pradesh, the species was reported as a narrow endemic to Western Ghats, especially to the states of Karnataka, Kerala, Maharashtra, and Tamil Nadu (Singh et al. 2015) and occasionally in Bailadilla, Madhya Pradesh (Arora 1968). However, no specimen was found in any of the National Herbarium from the mentioned region which at present belongs to the state of Chhattisgarh. Further, thorough literature survey also concludes uncertain distribution of the species *Clematis wightiana* in the state of Chhattisgarh. The present report of the species represents an extended distributional range to the state as well as a new record for the state of Arunachal Pradesh, earlier known from Western Ghats and the state of Mizoram. In the present communication, detailed descriptions of the species with citation, type, flowering & fruiting data, ecology, and distribution status are provided along with herbarium images.

**Clematis wightiana**


Type: India, without locality, R. Wight s.n. (MH)

Large woody climbers, c. 2–5 m high, covered with shining greyish or brownish hairs throughout; branches curved, 12-ribbed, villous. Leaves opposite, pinnately 3–5-foliolate; leaflets oblance-ovate or ovate-lanceolate, 6–10 x 3–5 cm, entire, often 3–5-lobed, ovate-cordate at base, margin irregularly dentate, acute or mucronate at apex, chartaceous, softly silky, dark above, brown sericeo tomentose beneath; nerves prominent, thick beneath; petioles long, silky hairy. Inflorescences axillary or terminal, paniculate; bracts and bracteoles present; bracts ovate, 0.3–0.5 cm long, hairy; bracteoles linear, 0.1–0.2 cm long, hairy, narrowly linear. Flowers white or pale cream or golden yellow, c. 6 cm across; perianth uniseriate, petaloid; tepals 4, ovate to ovate-elliptic, 1.5–3 x 0.5–0.8 cm, ribbed, soft tomentose outside, glabrous inside; stamens many; filaments linear, glabrous at apex and base, hairy at middle, 7–10 cm long; pistils many; style feathery, hairy, white, 0.3–0.5 cm long. Achene ovate, 0.4–0.5 x 0.2–0.3 cm, compressed, silky hairy, crowned with persistent elongated feathery style (Image 1).

Flowering & fruiting: November–March; January–May

**Distribution:** India: Arunachal Pradesh, Karnataka, Kerala, Maharashtra, Mizoram, Tamil Nadu

**Habitat, Ecology & Conservation Status:** These woody climbers grow in open forests, on hill slopes at 1,300–1,800 m altitude. The species is facing a shrinking population in its natural habitat due to overgrazing by domestic animals, collection of fire wood by localities, deforestation for rapid urbanization, development of the tourism sector, increased number of scientific field tours throughout the year, and uncontrolled collection of specimens in bulk, etc. Although no measure has been proposed for this species till now, to prevent the reduction of the population size of the species in nature, in situ as well as ex situ conservation measures are to be adopted at the government level.

Specimens examined: 25157 (ARUN), 13.xi.2010, India, Arunachal Pradesh, West Siang, Mechuka, 28.60027N, 94.13444E, 1,800 m, coll. M. Bhaumik; 25159 (ARUN), 13.xi.2010, India, Arunachal Pradesh, West Siang, Rego to Tato, 27.79944N, 94.07472E, 1,200 m, coll. M. Bhaumik; 15601 (ASSAM), India, Arunachal Pradesh, West Kameng, Brukpata, 27.37666N, 92.28583E, 1,960 m, coll. G. Panigrahi; without coll. no. (ASSAM), 08.iv.1957, India, Arunachal Pradesh, West Siang, slope near Rupa upto Jegaon, 27.20250N, 92.39805E, 1,960 m, coll. G. Panigrahi; without coll. no. (ASSAM), 08.iv.1957, India, Arunachal Pradesh, Hill slope near Rupa upto Jegaon, 27.20250N, 92.39805E, 1,960 m, coll. G. Panigrahi; without coll. no. (ASSAM), 08.iv.1957, India, Arunachal Pradesh, without coll. date, India, Karnataka, Chamarajanagar, 12.92254N, 76.94515E, 733 m, coll. unknown; without coll. no. (MH), without coll. date, India, Karnataka, Chamarajanagar, 11.92254N, 76.94515E, 733 m, coll. unknown; without coll. no. (MH), without coll. date, India, Kerala, Wayanad, 11.69334N, 76.12997E, 765 m, coll. unknown (MH);
Image 1. Herbarium specimen of *Clematis wightiana* Wall. deposited in ARUN, BSI.


**References**


Extended distribution of Clematis wightiana in Arunachal Pradesh

Pramanick & Bhaumik

I, 582 pp.

NAAS rating (India) 5.64

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.
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 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)

Date of Publication: 26 March 2024 (Online & Print)
DOI: 10.11609/jott.2024.16.3.24819-25018

Celebrating 25 years of building evidence for conservation
– Sanjay Molur, Pp. 24819–24820

New plant records for the flora of Saudi Arabia

Status of floristic diversity and impact of development on two sacred groves from Maval Tehsil (Maharashtra, India) after a century
– Kishor Himmat Saste & Rani Babanrao Bhagat, Pp. 24838–24853

A checklist of wild mushroom diversity in Mizoram, India
– Rajesh Kumar & Girish Gogoi, Pp. 24854–24880

Breeding of the ‘Critically Endangered’ White-rumped Vulture Gyps bengalensis in the Shan Highlands, Myanmar
– Sai Sein Lin Oo, Nang Lao Kham, Marcela Suarez-Rubio & Swen C. Renner, Pp. 24973–24978

Nurturing orphaned Indian Grey Wolf at Machia Biological Park, Jodhpur, India
– Hemsingh Gehlot, Mahendra Gehlot, Tapan Adhikari, Gaurav & Prakash Suthar, Pp. 24979–24985

A record of the Hoary Palmer Unkana ambasa (Moore, [1858]) (Insecta: Lepidoptera: Hesperiidae) from Assam, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 24990–24992

A record of three gobioid fishes (Actinopterygii: Gobiiformes: Gobiidae) from the Gujarat coast, India
– Jyotil K. Dave & Varsha M. Trivedi, Pp. 24993–24994

A checklist of wild mushroom diversity in Mizoram, India
– Rajesh Kumar & Girish Gogoi, Pp. 24819–24820

Baya Weaver Ploceus philippinus in Nagaon District of Assam, India: a zoogeographical analysis
– Nilotpal Kalita, Neeraj Bora, Sandip Choudhury & Dhrubajyoti Sahariah, Pp. 24949–24955

D’Ering Memorial Wildlife Sanctuary, a significant flyway and a preferred stopover (refuelling) site during the return migration of the Amur Falcon Falco amurensis (Radde, 1863)
– Tapak Tamir, Abprez Thungwon Kimsing & Daniel Mize, Pp. 24967–24972

Short Communications

New records of forty-nine herbaceous plant species from lateritic plateaus for Ratnagiri District of Maharashtra, India

First report of moth species of the family Tineidae (Lepidoptera) in regurgitated pellets of harriers in India

Notes

Capturing the enchanting glow: first-ever photographs of bioluminescent mushroom Mycena chlorophos in Tamil Nadu, India

Sighting of Large Branded Swift Pelopidas sinensis (Mabille, 1877) (Hesperiidae: Hesperiinae) in Delhi, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 25010–25012

Species distribution modelling of Baya Weaver Ploceus philippinus in Nagaon District of Assam, India: a zoogeographical analysis
– Nilotpal Kalita, Neeraj Bora, Sandip Choudhury & Dhrubajyoti Sahariah, Pp. 24949–24955

Diversity and species richness of avian fauna in varied habitats of Sorapung range and vicinity in Dehing Patkai National Park, India

Species distribution modelling of Baya Weaver Ploceus philippinus in Nagaon District of Assam, India: a zoogeographical analysis
– Nilotpal Kalita, Neeraj Bora, Sandip Choudhury & Dhrubajyoti Sahariah, Pp. 24949–24955

Diversity and species richness of avian fauna in varied habitats of Sorapung range and vicinity in Dehing Patkai National Park, India

D’Ering Memorial Wildlife Sanctuary, a significant flyway and a preferred stopover (refuelling) site during the return migration of the Amur Falcon Falco amurensis (Radde, 1863)
– Tapak Tamir, Abprez Thungwon Kimsing & Daniel Mize, Pp. 24967–24972

Notes

Capturing the enchanting glow: first-ever photographs of bioluminescent mushroom Mycena chlorophos in Tamil Nadu, India

Sighting of Large Branded Swift Pelopidas sinensis (Mabille, 1877) (Hesperiidae: Hesperiinae) in Delhi, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 25010–25012

Recent record of True Giant Clam Tridacna gigas from the Sulu Archipelago and insight into the giant clam fisheries and conservation in the southernmost islands of the Philippines

A record of the Hoary Palmer Unkana ambasa (Moore, [1858]) (Insecta: Lepidoptera: Hesperiidae) from Assam, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 25010–25012

Notes

Capturing the enchanting glow: first-ever photographs of bioluminescent mushroom Mycena chlorophos in Tamil Nadu, India

Sighting of Large Branded Swift Pelopidas sinensis (Mabille, 1877) (Hesperiidae: Hesperiinae) in Delhi, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 25010–25012

Rodent - a part of culture and revolution in India
– Hiranmoy Chetia & Murali Krishna Chatakonda, Pp. 25016–25018

Notes

Capturing the enchanting glow: first-ever photographs of bioluminescent mushroom Mycena chlorophos in Tamil Nadu, India

Sighting of Large Branded Swift Pelopidas sinensis (Mabille, 1877) (Hesperiidae: Hesperiinae) in Delhi, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 25010–25012

Rodent - a part of culture and revolution in India
– Hiranmoy Chetia & Murali Krishna Chatakonda, Pp. 25016–25018

Notes

Capturing the enchanting glow: first-ever photographs of bioluminescent mushroom Mycena chlorophos in Tamil Nadu, India

Sighting of Large Branded Swift Pelopidas sinensis (Mabille, 1877) (Hesperiidae: Hesperiinae) in Delhi, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 25010–25012

Rodent - a part of culture and revolution in India
– Hiranmoy Chetia & Murali Krishna Chatakonda, Pp. 25016–25018

Notes

Capturing the enchanting glow: first-ever photographs of bioluminescent mushroom Mycena chlorophos in Tamil Nadu, India

Sighting of Large Branded Swift Pelopidas sinensis (Mabille, 1877) (Hesperiidae: Hesperiinae) in Delhi, India
– Sanath Chandra Bohra, Manmath Bharali, Puja Kalita & Rita Roy, Pp. 25010–25012

Rodent - a part of culture and revolution in India
– Hiranmoy Chetia & Murali Krishna Chatakonda, Pp. 25016–25018