NOTE



Ixora rangonensis Bremek. (Rubiaceae): A New Record for India

H. A. Barbhuiya^(1*), B. K. Dutta⁽²⁾, Ajit Kr. Das⁽²⁾ and A. K. Baishya⁽³⁾

1. Botanical Survey of India, Eastern Regional Centre, Shillong-793003, India.

2. Department of Ecology and Environmental Science, Assam University, Silchar-788011, India.

3. Laban, Shillong-793009, Meghalaya, India.

* Corresponding author. Email: hussainbsi@yahoo.com

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ABSTRACT: *Ixora rangonensis* is reported for the first time from India. It belongs to subgenus *Ixora* sect. *Brachypus* and is allied to *I. tigriomustax*. A detailed taxonomic description along with line drawings and photograph is provided in the present communication to facilitate its future identification.

KEY WORDS: Ixora sect., Brachypus, critically endangered, rediscovery.

INTRODUCTION

Ixora L. is the third largest genus of the family Rubiaceae, comprising of about 500 species (Mouly *et al.*, 2009), distributed in tropical and subtropical regions of the world. In India the genus is represented by 46 species (Hooker, 1880; Bremekamp, 1937, 1938, 1959; Husain and Paul, 1989, 1991; Sivadasan and Mohanan, 1991; Deb and Rout, 1992; Pradeep, 1997).

Ixora rangonensis Bremek. was described by Bremekamp (1959) based on a collection made by Po Khant from Thingungyun, Rangoon district of Myanmar. So far, there is no record of collection of this species after the type collection. Recently, while undertaking a field exploration in the Kalain Range of Borail Wild Life Sanctuary, in the Cachar district of Assam, the first author spotted a small shrubby *Ixora* with white flowers. Subsequent critical study of the specimens and consultation of literature revealed the identity of the plant as *Ixora rangonensis* rediscovered after a gap of about 53 years which forms a new addition to the genus *Ixora* in India. A description of the plant along with photographs, line drawings and distribution map are provided.

TAXONOMIC TREATMENT

Ixora rangonensis Bremek. Indian Forester 85: 374. 1959. Figs. 1 & 2

Shrub up to 1 m high. Young branches pubescent, 3–3.5 mm in diam., internodes 3–8 cm long. Leaves petiolate; petiole 1–1.2 cm long; leaf blade oblanceolate, 20–29 × 8–9.4 cm cuneate at the base, caudate acuminate at apex, cauda *ca*. 2.5 cm long, entire along

margin, glabrous on both sides, lateral nerves 11-13 pairs. Stipules linear-triangular, ca. 1.5 cm long, villous, cusp ca. 5 mm. Bracts supporting inflorescence sessile, ovate, $4-4.4 \times 1.8-2.1$ cm, base cordate, apex acuminate, nerves 8-9 on either half of midrib. Inflorescence cymose, ca. 10 cm long, 350-450 flowered, peduncle 6-8 cm long, pubescent; bracts linear-lanceolate, 5-6 mm long, pubescent. Flowers sessile or pedicellate, bracteolate; pedicels to 2 mm long, hispid; bracteoles 2.5-3 mm long, linear, minutely hairy; calyx tube ca. 2 mm long and ca. 1.2 mm in diameter, lobes light brown, ovate, 1-2 mm, pubescent; corolla white, tube 20-25 mm long, glabrous; lobes oblong, $4.5-5 \times 1-1.2$ mm, rounded at apex; stamens with filaments 0.6-1 mm long, glabrous; anthers sub-basifixed, linear, ca. 5 mm long, tip pointed, sagittate at base; ovary 2-celled, ovule one in each locule; style slender, as long as corolla tube, tip fusiform, logitidunally cleft forming two stigmatic lobes, lobes ca. 3 mm long. Fruits not seen.

Flowering: April-June.

Specimen examined: INDIA, Assam: Cachar, Borail Wild Life Sanctuary, Kalain Range, Near Kalaincherra, 25°01'38''N, 92°29'30''E, elev.138m, 9 May 2011, *H. A. Barbhuiya* 659 (ASSAM).

Distribution: India (Assam, Cachar); Myanmar (Rangoon, Thingungyun).

Conservation status in India: The area of occupancy is estimated to be 8 km² (Criteria CR B2<10 km²), known to exist at only single location (CR B2a), the population size is estimated to number less than 10 individuals, so far only one plant was seen (Criteria CR D<50 mature individual), while there is degradation of the habitat (CR B2b(iii)) due to slash-and-burn cultivation and tree felling. Following the IUCN Red List Categories and Criteria (IUCN 2001), this species has been classified as Critically Endangered (CR).





Fig. 1. *Ixora rangonensis* Bremek. A: Habit. B: Stipule, adaxial view. C: A portion of the inflorescence. D: Ovary with calyx and bract. E: Stamen. F: Style and Stigma.





Fig. 2: Inflorescence of Ixora rangonensis Bremek.

DISCUSSION

Ixora rangonensis is closely allied with *I. tigriomustax.* However, former is clearly distinct from the latter by having glabrous, longer leaf blades, sessile bracts supporting the inflorescence, longer pedicels of the lateral flowers, pubescent calyx lobes, longer peduncles, corolla tubes and styles and obtuse corolla lobes. The specimen collected slightly differs from the earlier descriptions by having pubescent young branches, oblanceolate, caudate acuminate leaf blades, more pairs of lateral nerves and shorter petioles (see Table 1).

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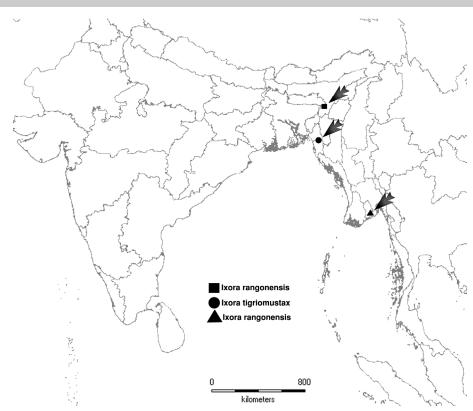


Fig.3. Distribution map of discussed *lxora* species. Square indicates the present collection site of *l. rangonensis* while triangle indicates the site from where *l. rangonensis* was reported to occur earlier and circle indicates the site of occurrence of *l. tigriomustax*.

Table 1. Comparison between <i>lxora tigriomustax</i> and <i>lxora rangonensis</i>
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Characters		<i>Ixora tigriomustax</i> (After Bremekamp, 1959; Husain and Paul, 1989)	<i>Ixora rangonensis</i> (After Bremekamp, 1959)	<i>Ixora rangonensis</i> (Present collection).
Habit		Unknown	Shrub, ca. 1 m high	Shrub, up to 1 m high.
Young branches		Pubescent, 3-3.5 mm in diam.	Glabrous, 2.8-3.3 mm in diam.	Pubescent, 3-3.5 mm in diam.
Petiole		Puberulous-pubescent, 0.7–1.2 cm long.	Glabrous 1.0–1.5 cm long	Glabrous, up to 0.9 cm long.
Leaf	Shape	Elliptic or oblong-elliptic, apex acuminate, glabrous above, pubescent on nerves beneath.	Oblong or oblong-obovate, both surfaces glabrous.	Oblanceolate, apex caudate acuminate, both surfaces glabrous.
blade	Size	$18-24 \times 7.8-9.5$ cm	$18-23.5 \times 6.5$ cm	$20-29 \times 8-9.4$ cm
	Lateral nerves	10-11 pairs	9–10 pairs	11-13 pairs
Stipule		Broadly triangular	Ovate-triangular	Narrow-triangular
Inflorescence		Puberulous-pubescent, comprising around 300–400 flowers.	Puberulous-pubescent, comprising around 300 flowers.	Puberulous-pubescent, comprising around 350–450 flowers.
Bracts supporting inflorescence		Petiolate, ovate, $4-5 \times 2-5$ cm, $5-6$ nerved on either half.	Sessile, ovate <i>ca.</i> 6.5×3.5 cm, 5-nerved on either half	Sessile, ovate, $4-4.4 \times 1.8-2.1$ cm, $8-9$ nerved on either half
Peduncle		3–5 cm	6 cm long	6–8 cm long
Pedicels of lateral flowers		0.5–1 mm long.	1–2 mm long.	1–2 mm long.
Calyx		lobes 1–2 mm long, sub-glabrous.	lobes 1–2 mm long, pubescent.	lobes 1–2 mm long, pubescent.
Corolla		Colour not known, tube 14 mm. long. lobes acute, $ca. 4.4 \times 1.5$ mm.	White, glabrous, tube 15 mm long, lobes oblong, obtuse, $ca. 6 \times 1.5$ mm.	White, glabrous, tube 20–25 mm long, lobes oblong, obtuse, $4.5-5 \times 1-1.2$ mm.
Anthers		ca. 3.5 mm. long	ca. 6 mm. long	ca. 5 mm long.
Style		15–16 mm long, glabrous	ca. 15 mm long	20–25 mm long.
Ovary		Pubescent.	Sparsely puberulous-pubescent or subglabrous.	Pubescent.





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印度的新紀錄種 - Ixora rangonensis Bremek. (茜草科)

H. A. Barbhuiya^(1*), B. K. Dutta⁽²⁾, Ajit Kr. Das⁽²⁾, A. K. Baishya⁽³⁾

1. Botanical Survey of India, Eastern Regional Centre, Shillong–793003, India.

2. Department of Ecology and Environmental Science, Assam University, Silchar-788011, India.

3. Laban, Shillong-793009, Meghalaya, India.

* 通信作者。Email: hussainbsi@yahoo.com

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摘要:本文報導了在印度首次發現的Ixora rangonensis,本種被歸於Brachypus節之下,並相近於I. tigriomustax。本文提供本種分類描述、手繪圖及彩色照片,以支持本文之處理並方便鑑定此物種。

關鍵詞:Brachypus節、極危、再發現。

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