

***Sesbania sesban* var. *bicolor* (Fabaceae): An addition to the flora of Uttar Pradesh (India)**

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Abstract

Sesbania sesban var. *bicolor* has been observed from Kachhla Ghat (Budaun district), Uttar Pradesh along the Ganga River. It is here reported as new to the flora of this state.

Résumé

Sesbania sesban var. *bicolor* a été observé à Kachhla Ghat (district de Budaun), Uttar Pradesh, le long du fleuve Gange. Il est ici signalé comme nouveau dans la flore de cet État.

Key Words: Flora, new record.

Mots clés : flore, nouvel enregistrement.

Introduction

During the study of vegetation along the Ganga River in Uttar Pradesh, we observed from Kachhla Ghat (Budaun) *Sesbania sesban* var. *bicolor* (Wight & Arnott, 1834: 214) Andrews (1952: 232). This taxon has not been previously reported in Uttar Pradesh. Therefore, it is documented here for the first time, along with taxonomic details, a field photograph and a digital herbarium sheet to facilitate its identification.

Résumé

Au cours d'une étude botanique le long du Gange dans l'Uttar Pradesh, à Kachhla Ghat (Budaun), nous avons observé *Sesbania sesban* var. *bicolor* (Wight & Arnott, 1834: 214) Andrews (1952: 232). Ce taxon n'avait pas été signalé auparavant dans l'Uttar Pradesh. Il est ici documenté avec une brève description et des illustrations.

Materials and Methods

The voucher specimens were collected in 2023 and processed following standard herbarium methods and deposited in Patanjali Research Foundation Herbarium (PRFH), Haridwar, Uttarakhand. Identification, authentication and geographic distribution data have been done with the relevant literature of Sun & Bartholomew (2010), Singh *et al.* (2016), Mitta & Mudavath (2019) and Sanjappa (2020).

Taxonomic treatment

Sesbania sesban* var. *bicolor (Wight & Arnott) Andrews, *The Flowering Plants of the Anglo-Egyptian Sudan* 2: 232 (1952); Mitta & Mudavath, *Annals of Plant Sciences* 8(4): 3546-3548 (2019); M. Sanjappa in A. A. Mao & S. S. Dash, *Flowering plants of India: Dicotyledons, Acanthaceae – Avicenniaceae* Vol. 1: 422 (2020); *Sesbania aegyptiaca* var. *bicolor* Wight & Arnott, *Prodromus Florae Peninsulae Indiae Orientalis* 1: 214 (1834).

Specimen examined: Uttar Pradesh, Buduan district, Kachhla Ghat, 28/03/2023, *Anupam Srivastava 2842* (PRFH).

Description (fig. 1 & 2): Treelet, suffrutescent, 2-6 m tall. Branches pubescent when young, glabrescent when mature. Stipules triangular-lanceolate, 2-3 mm long, caducous, pubescent. Leaves paripinnate; petiole and rachis appressed pubescent; rachis 3-8 cm long; petiolules appressed pubescent; leaflets 10-14, alternate, 12-24 × 0.3-0.5 mm, linear-oblong to oblong, base obliquely rounded, apex rounded to retuse and mucronate, abaxially sparsely appressed pubescent when young becoming glabrescent, adaxially glabrous or glabrescent, purplish black glandular on both surfaces. Racemes axillary and terminal, 4-10-flowered; peduncle 4-6 cm long, slender, pubescent when young becoming glabrescent; bracts linear-lanceolate, caducous, abaxially sparsely appressed pubescent; pedicel *ca.* 2 cm long, slender, pubescent; bracteoles smaller than bracts, caducous. Calyx purplish black, campanulate; teeth 5, shortly triangular, appressed pubescent to glabrescent inside. Corolla standard dark purple to maroon coloured, transversely elliptic, 1.1-1.3 cm long; wings partly purplish black or red, oblong, 1-1.2 cm long, with a curved *ca.* 4 mm long claw, base inconspicuously auriculate, apex rounded; keel partly purplish black or red, subsemicircular, 6-8 × 5-7 mm, lamina base narrower than apex and with a triangular short auricle, claw as long as calyx. Staminal tube 6-8 mm long. Stamens diadelphous (9+1); anthers homomorphic, ellipsoid, dorsifixed, 2-loculed, longitudinally dehiscent, often glabrous. Ovary linear, many ovuled, glabrous; style *ca.* 5 mm long, curved, glabrous; stigma globose, terminal. Pod contorted when young but straight or slightly curved at maturity, subterete, 15-25 × 0.3-0.4 cm, *ca.* 5 mm between transverse septa, base often with a marcescent calyx, beaked at the apex. Seeds 20-40 per pod, 3-4 × *ca.* 2 mm, subterete, slightly compressed.

Flowering and Fruiting: February-June.

Habitat: Found along the Ganga River, in Kachhla Ghat, in small population of 3 individuals.

Distribution in India: Mitta & Mudavath (2019) reported this plant from Andhra Pradesh, and according to Sanjappa (2020), it also occurs in Gujarat and Maharashtra.

Key for *Sesbania sesban* and *Sesbania sesban* var. *bicolor* in India

1. Tree up to 4 m tall; corolla pale yellow coloured; standard callus acuminate at apex ***Sesbania sesban* var. *sesban***
- 1a** Tree up to 6 m tall; corolla dark purple to maroon coloured; standard callus blunt at apex ***Sesbania sesban* var. *bicolor***



Figure 1: *Sesbania sesban* var. *bicolor* in natural habitat. Photo: Bhasker Joshi.

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Patanjali Research Foundation Herbarium Haridwar-249405	
Collection Number: 2842	
Botanical Name: <i>Sesbania sesban</i> var. <i>bicolor</i> (Wight & Arn.) F.W.Andrews	
Family: Fabaceae	Habit: Tree
Common Name: Bicolor Sesban	
Locality:	District/State: Budaun, Kachhla Uttar Pradesh, India
Date of Collection:	Flowering & Fruiting: 28-03-2023 February-June
Ecological Notes: Occasional; found along Ganga River.	
Collector: Dr. Anupam Srivastava	Identified By: Anupam Srivastava 06/04/2024
Approved by:	
Acharya Balkrishna	

Figure 2: *Sesbania sesban* var. *bicolor* [© Herbarium (PRFH), Haridwar, Uttarakhand].

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