https://doi: 10.61289/jibs2023.12.21.1207

RESEARCH ARTICLE



Note on the distribution of *Schweinfurthia pterosperma* (A. Rich.) A. Braun in Kachchh-Gujarat

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Abstract

Schweinfurthia pterosperma (A. Rich.) A. Braun is a rare plant species known from few localities of Kachchh district, Gujarat. During the floristic exploration of Bhuj forest west range of Kachchh district, S. *pterosperma* was collected from the rocky hillocks. Detailed description and photographs are provided for easy identification.

Keywords: Bhuj- Kachchh, Plantaginaceae.

Introduction

Plantaginaceae is a family of flowering plants in the order Lamiales comprising about 94 genera and approximately 1900 species (Xu, Z. *et al.* 2017). The genus *Schweinfurthia* A.Braun belongs to Plantaginaceae (APG IV 2016). It was first described in 1866. Previously this genus was placed in Scrophulariaceae (Hooker 1885, Cooke 1905, Oliver 1906, Shah 1978, Bhandari 1967).This genus comprises six species worldwide (POWO 2016) whereas in India two species occur (BSI ENVIS 2011 and Barik *et al.* 2018).

As a part of first author's Ph.D. work on the forest areas of Bhuj taluka of Kachchh district, several field trips were conducted during the years 2021-2023. Some individuals of *Schweinfurthia* were collected from two forest areas viz, Bhuj and Makanpar of Bhuj forest west range of Kachchh district. Critical examination of the specimens, relevant literature (Oliver Daniel 1906) and study of specimens housed at Kew

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How to cite this article: Sumra KA, Mehta PK. 2023. Note on the distribution of *Schweinfurthia pterosperma* (A. Rich.) A. Braun in Kachchh-Gujarat. J. Indian bot. Soc., Doi: 10.61289/jibs2023.12.21.1207

Source of support: Nil

Conflict of interest: None.

herbarium (*Lord s.n.*, Sudan K000411320 and Schweinfurt *173*, Sudan K000411321) and Edinburgh herbarium (*Cubey* E00099207) confirmed the identity of the specimen as *Schweinfurthia pterosperma* (A. Rich.) A. Braun.

Geographical Distribution

The native range of this species is north - East Tropical Africa, Arabian Peninsula, and South. Pakistan (POWO 2023). *Schweinfurthia papilionacea* (L.) Boiss. is a related species of *S. pterosperma*. *S. papilionacea* has been recorded from arid and semi-arid regions of India (Hooker 1885, Cooke 1908, Shah 1978, Bhandari 1990, Pandey *et al.* 2009, Patel *et al.* 2011, Joshi 2012, Joshi *et al.* 2013). However, the occurrence of *S. pterosperma* has been reported by only few workers (Rao 1981, Bhatt 1993, Raole 1993) from the saline habitat near Khavada in Kachchh district of Gujarat. Since then, there are no distributional records of *S. pterosperma* available in India. The species is mentioned as rare in the list of endemic and threatened taxa of India prepared by ENVIS Resource Partner on Biodiversity, India (BSI ENVIS 2011) and Barik *et al.* (2018).

Taxonomical Description

Schweinfurthia pterosperma (A.Rich.) A.Braun Sitzungsber. Ges. Naturf. Freunde Berlin 20: 24 (1866); *Antirrhinum pterospermum A.Rich.* in Tent. Fl. Abyss. 2: 115 (1850).

Annual or perennial herb up to 10-45 cm tall, branching at a narrow angle; Stem green, glabrous, cylindrical, internodes 2-4.8 cm long; Leaves distinctly petiolate, oblong-ovate to narrowly spathulate, 7–35 x 1.5–15 mm; Inflorescence with 2–10(–20) flowers; pedicels 4–13 mm long, becoming evenly recurved (Figure 1c); Calyx green, sepals 5, lobes, ovate, the longest 4–6 mm long; Corolla 5–8mm long, Gamopetalous,

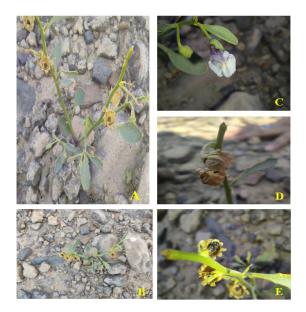


Figure 1: *Schweinfurthia pterosperma* (A. Rich.) A. Braun: (A) and (B) Plant habit and habitat (C). Flower; (D). fruit (E). dehiscent capsule with mature seed

petals 5, 2-3 lobed, oblong - semi acute, 9-14 mm, whitish with pink throat and yellow palate; Stamens 4, filiform, hairy at the base, white, 1.5-3 mm; carpels 2, globular, 1.5-2.5 mm, style glabrous, filiform, Capsule 4.2–8 mm long; Seeds black, 1–1.5 mm long (Figure 1 D and E).

Habitat and Ecology

This species grows in rocky and sandy soil (Figure 1 A and B). It occurs on the rocky and hilly undulated terrain and was found frequently associated with *Cleome viscosa* L., *Aristida adscensionis* L., *Pulicaria angustifolia* DC., *Suaeda fruticosa* (Linn.) Forsk., *Prosopis juliflora* (Sw.) DC. and *Euphorbia caducifolia Haines*.

Flowering and Fruiting

February to October

Acknowledgements

The authors are thankful to the forest Department, west division of Kachchh – Gujarat for permitting to conduct the research work in forest areas. First author is thankful to the SHODH scheme, Department of Education - Gujarat for providing fellowship for the study. Mr. Kishan Prajapati and Ms. Jignashaba Jadeja are thanked for their help in photography of the plant.

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