



Rediscovery of the red-listed grass *Isachne dimyloides* (Poaceae: Micrairoideae) 130 years after type collection

MOONMEE DEVI¹ & DEBJYOTI BHATTACHARYYA^{1*}

¹Plant Taxonomy and Biosystematics Laboratory, Department of Life Science & Bioinformatics, Assam University, Silchar 788 011, India

*author for correspondence: (dbhattacharyya_aus@yahoo.in)

Abstract

This paper reports rediscovery of a rare grass *Isachne dimyloides* after a gap of 130 years since its type collection. The type locality of the species is the Darjeeling district of West Bengal, India and the collection was made by C.B. Clarke in the year 1884. The present collection was made in 2012 from Cachar district of Assam (India) which also indicates its geographic range extension from the Darjeeling foothills to the Assam floodplain. In this paper a description of the species, a key, and an illustration are provided to facilitate identification. Priority conservation is highly recommended for this rare species.

Key words: Assam, Barak Valley, Darjeeling, India

Introduction

The genus *Isachne* Brown (1810: 196) comprises ca. 90 species (Mabberley 2008) and is mostly distributed in tropical and warm temperate regions of Asia to Australia. The genus is mostly characterized by its hygrophilous habit, sub-globose to obovoid 2-flowered spikelets with florets disarticulating above the glumes, glandular or eglandular banded pedicels and sexually variable florets (Prakash & Jain 1984). In India, it is represented by 29 species out of which 18 are said to be endemic (Prakash & Jain 1984). Walter & Gillett (1998) enumerated 11 species of this genus in the world as RET (Rare, Endangered and Threatened) taxa of which seven belong to India.

In an ongoing study on the family Poaceae in southern Assam (Barak Valley), the authors came across an interesting population of the genus *Isachne* from Loharband area of Inner Line Reserve Forest in Cachar district. After critical morpho-taxonomic analysis and the study of relevant literature (Bor 1949, Prakash & Jain 1984), the specimen was identified as *Isachne dimyloides* Bor (1949: 96). The identity of the species was confirmed by examination of the original specimen of an isotype housed at CAL and digitized images of the holotype and isotype at K and BM, respectively (herbaria acronyms according to Thiers 2015).

It is worth mentioning that the species was not collected since its type collection in the year 1884 by C.B. Clarke. There are no records in the literature (Bor 1960, Prakash & Jain 1984, Walter & Gillett 1998, Noltie 2000). The present report constitutes its rediscovery after a gap of 130 years. The present collection of this species from Barak Valley, Assam signifies an extension of known geographic distribution from the foothills of the Himalayas to the floodplain of Assam (Barak river basin) (Fig 1). Both regions are characterized by tropical forests with high rainfall, moderate to high temperature in summer, and loose, sandy-clayey soil.

Taxonomic Treatment

Isachne dimyloides Bor (1949: 96). (Fig. 2)

Type:—INDIA. West Bengal, Darjeeling district, ‘Sikkim Terai’, Dulkajhar, 500 ft, 16 October 1884, C.B. Clarke 36764 [holotype K, digitized image! (K000245438); isotypes CAL, original specimen! (CAL0000002103) & BM, digitized image! (000573595BM)].