



An account on Endemic Taxa of Indian Subcontinent collected from Buxa Tiger Reserve, Alipurduar, West Bengal

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Abstract

The twenty five taxa that were collected in between 2011 to 2015 from Buxa Tiger Reserve, Alipurduar, West Bengal share endemism between India and Indian subcontinent countries. Out of 25 taxa, two taxa are strictly endemic to India. *Eranthemum erythrochilum* J.R.I. Wood (Acanthaceae) found only in Buxa Tiger Reserve (W. Bengal duars) in the world. In the present paper author discussed their phenology and abundance in the tiger reserve.

Keywords: Alipurduar, Buxa Tiger Reserve, Endemic, Indian subcontinent, West Bengal.

Introduction

The Indian subcontinent includes all or part of Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka, as well as the Maldives. Geographically, it is the peninsular region in south-central Asia, delineated by the Himalayas in the north, the Hindu Kush in the west, and the Arakanese in the east. India harbours highest number of endemic plants next to Australia (Hajra & Mudgal, 1997). They largely occur in three major phytogeographical regions, viz., the Himalayas & North East India, Peninsular India, and the Andaman & Nicobar Islands.

The Protected areas are one of the well-recognized *in-situ* conservation methods to protect the biodiversity across the world. Scientific Research/documentation in the protected areas is vital for a better understanding of ecosystems, their functions, ecology and status of various species and their habitats. The Buxa Tiger Reserve (BTR), Alipurduar, West Bengal falls in the foot hills of the Eastern Himalayas (Duars area). It was established in 1983 under Project Tiger, spreads

in an area of 738.5 sq km. It is bordered by Bhutan in the North, Cooch Behar district in the South, Assam by the Sankosh river in the East and Cooch Behar forest division in the West. Buxa National Park (117 sq km), Buxa Wildlife Sanctuary (251.5 sq km), and Reserve Forest (370 sq km) are essentially a part of BTR.

During the intensive botanical explorations of the Buxa Tiger Reserve from 2009 to 2015, author collected immense number of botanically interesting taxa. After perusal of literature (Grierson and Long, 1984-2001; Ahmedullah and Nayar, 1987; Mostaph and Uddin, 2013; Singh et al., 2015; Bhattacharjee and Chowdhery, 2018; Kambale & Yadav, 2019; Press et al., 2000), and distribution of the taxa in world were verified through authentic online database: Plants of the world online (<http://powo.science.kew.org>) revealed that 25 taxa collected from the reserve area are endemic to India, and Indian subcontinent countries. Out of 25, two taxa are strictly endemic to India. *Eranthemum erythrochilum* J.R.I. Wood (Acanthaceae) found only in Buxa Tiger Reserve

(W. Bengal duars) in the world while *Baliospermum calycinum* Mull.Arg. var. *bracteatum* Chakrab. & N.P. Balakr. distributed in Arunachal Pradesh and West Bengal (BTR) in India.

In present investigation, an annotated checklist of 25 taxa have been provided in table 1 with its phenology and abundance in study area.

Table 1: Distribution of endemic taxa of Indian subcontinent collected from BTR with its phenology and abundance.

Sl. No.	Name of taxa with family	Indian subcontinent countries	Phenology	Abundance in study area
1	<i>Baliospermum calycinum</i> Mull.Arg. var. <i>bracteatum</i> Chakrab. & N.P. Balakr. (Euphorbiaceae)	India (Arunachal Pradesh and West Bengal)	Sep.–Oct.	Scarce
2	<i>Eranthemum erythrochilum</i> J.R.I. Wood (Acanthaceae)	India (BTR/W. Bengal duars)	Jan.–Feb.	Scarce
3	<i>Acanthus carduaceus</i> Griff. (Acanthaceae)	India, Bhutan	Dec.–Mar.	Scarce
4	<i>Agapetes bhutanica</i> N.P. Balakr. & Sud. Chowdhury (Ericaceae)	India, Bhutan	Mar.–May	Scarce
5	<i>Ardisia involucrata</i> Kurz (Myrsinaceae)	India, Bhutan	Jun.–Feb.	Scarce
6	<i>Beilschmiedia dalzellii</i> (Meisn.) Kosterm. (Lauraceae)	India, Bhutan	Mar.–May	Scarce
7	<i>Dendrophthoe falcata</i> (L.f.) Blume var. <i>pubescens</i> (Hook.f.) V. Chandras. (Loranthaceae)	India, Bhutan	Aug.–Mar.	Scarce
8	<i>Elaeagnus pyriformis</i> Hook.f. (Elaeagnaceae)	India, Bhutan	Dec.–May	Scarce
9	<i>Impatiens latiflora</i> Hook.f. & Thomson (Balsaminaceae)	India, Bhutan	Sep.–Dec.	Scarce
10	<i>Lindenbergia hookeri</i> C.B. Clarke ex Hook.f. (Scrophulariaceae)	India, Bhutan	Jan.–Jul.	Scarce
11	<i>Lindenbergia titensis</i> Sikdar & Maiti (Scrophulariaceae)	India, Bhutan	Jan.–Apr.	Scarce
12	<i>Piper betleoides</i> C. DC. (Piperaceae)	India, Bhutan	Feb.–Apr.	Common
13	<i>Synotis bhot</i> (C.B. Clarke) C. Jeffrey & Y.L. Chen (Asteraceae)	India, Bhutan	Dec.–Feb.	Scarce
14	<i>Trachelospermum assamense</i> Woodson (Apocynaceae)	India, Bhutan	Apr.–Feb.	Scarce
15	<i>Didymocarpus pedicellatus</i> R.Br. (Gesneriaceae)	India, Nepal	Jun.–Oct.	Scarce
16	<i>Neanotis rhombicarpa</i> T. Yamaz. (Rubiaceae)	India, Nepal	Aug.–Oct.	Scarce
17	<i>Zeuxine lindleyana</i> A.N. Rao (Orchidaceae)	India, Nepal	Jan.–May	Scarce
18	<i>Bambusa cacharensis</i> R.B. Majumdar (Poaceae)	India, Bangladesh	Feb.	Scarce
19	<i>Hoya parasitica</i> (Roxb.) Wall. (Asclepiadaceae)	India, Bangladesh	Sep.–May	Scarce
20	<i>Ehretia pilosiphon</i> R.R. Mill (Ehretiaceae)	India, Bhutan, Nepal	Feb.–Jun.	Common

21	<i>Rubia sikkimensis</i> Kurz (Rubiaceae)	India, Bhutan, Nepal	Nov.–Mar.	Scarce
22	<i>Homalium napaulense</i> (DC.) Benth. (Flacourtiaceae)	India, Bangladesh, Nepal	Aug.–Dec.	Scarce
23	<i>Ziziphus apetala</i> Hook.f. (Rhamnaceae)	India, Bangladesh, Nepal	Mar.–May	Scarce
24	<i>Zeuxine longilabris</i> (Lindl.) Trimen (Orchidaceae)	India, Nepal, Sri Lanka	Jan.–Mar.	Common
25	<i>Ceropegia macrantha</i> Wight (Asclepiadaceae)	India, Bhutan, Nepal, Pakistan	Aug.–Oct.	Scarce

The plants that are restricted to India only (02 taxa); India and Bhutan (12 taxa); India and Nepal (03 taxa); India and Bangladesh (02 taxa); India, Bhutan and Nepal (02 taxa); India, Bangladesh and Nepal (02

taxa); India, Nepal and Sri Lanka (01 taxa), and India, Bhutan, Nepal, Pakistan (01 taxa) shown in the Fig. 1. The Buxa Tiger Reserve share highest number of taxa with Bhutan.

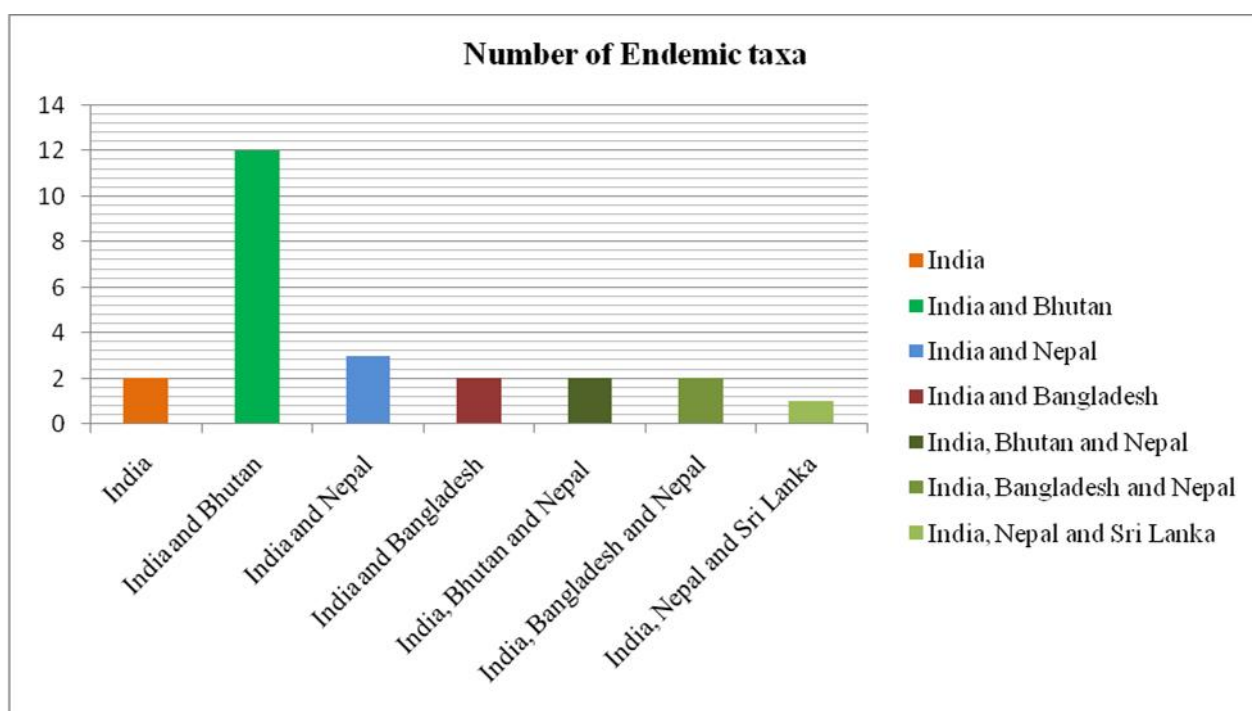


Fig. 1: Number of endemic taxa found in India, and Indian subcontinent countries.

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