

Indigofera longeracemosa Boiv. ex Baill. of Fabaceae: A new report to flora of Andhra Pradesh from Ardhagiri of Chittoor district

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Received: 24-10-2016

Revised: 11-01-2017

Accepted: 02-01-2017

Published: 18-01-2017

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ABSTRACT

India has a richest flora of medicinal importance and most of the plants are being used in the traditional medicine systems from the time immemorial. Lot of plant species are being added to the existing flora. This study deals with the addition of a plant species by name *Indigofera longeracemosa* Boiv.ex Baill. of Fabaceae family to the existing flora of Andhra Pradesh especially to Chittoor district.

KEY WORDS: Fabaceae, flora, *Indigofera longeracemosa* Boiv. ex Baill.

INTRODUCTION

Indian culture and tradition are intricately associated with medicinal plants. It is right time to conserve traditional plants as rapid industrialization is making the plant diversity to deplete time to time. The study area of Ardhagiri, a sacred grove of Chittoor district, Andhra Pradesh is located in between 13° 17' and 13° 20' Northern latitudes 78° 57'-79° 03' Eastern latitudes. The elevation of hill ranges is about 1250-1590 ft. above mean sea level. Hence, many plant species of medicinal importance are present in this area. During the floristic studies one of the interesting plant species of Fabaceae of Genus *Indigofera* has been noticed to be distributed in this area. *Indigofera longeracemosa* (Figure 1) Boivin is the plant species noticed as the addition to the flora of Chittoor district though it was well noticed in Tamil Nadu and Kerala States.

METHODOLOGY

Plant exploration studies were undertaken in different seasons of the year. Plants have been collected and provisional identifications methods with the help of G.S. Gamble (1915-1936) "Flora of Presidency of Madras" (Gamble and Fisher, 1957), "Flora of Tamil Nadu Karnatic

by Matthew (1981-1983), "Flora of Andhra Pradesh," "Flora of Kurnool," "Flora of Ananthapur and Chittoor District," and "Flora of Punjab." Further, the identification of plant species is confirmed after matching the sheets with authentic specimens in Herbarium, Department of Botany, S.V. University, Tirupati and Madras Herbarium, Coimbatore.

DISCUSSION

Floristic studies in this area are carried out by many people. However, in any of these works, the plant species *I. longeracemosa* has not added to the flora of Andhra Pradesh. Floristic studies of the districts have been carried out and published such as Flora of Anantapur District by Pullaiah and Yasoda (1989) [2], Flora of Kurnool District by Raju (1897) [3], Flora of Andhra Pradesh Vol. 1 by Pullaiah and Chenchiah (1997) [4], Flora of Andhra Pradesh vol. 2. by Pullaiah and Moulali (1997) [5], Flora of Andhra Pradesh vol. 3 by Pullaiah (1997) [6], Flora of Andhra Pradesh vol. 4 by Pullaiah and Babu (1997) [7], Rangacharyulu (1991) published doctoral thesis on Floristic studies of Chittoor District of Andhra Pradesh [9].

Indigofera species are well distributed in this area. Almost five different species of *Indigofera* are identified, viz.,



Figure 1: *Indigofera longeracemosa*

I. cordifolia, *I. trifoliata*, *I. longeracemosa*, *I. colutea*, *I. linnaei*.
Basing on the external morphological characters the dichotomous key is prepared and described as below.

Indigofera L.

- 1 Leaves simple ... *cordifolia*
- 1 Leaves compound:
- 2 Leaves trifoliolate ... *trifoliata*
- 2 Leaves multifoliolate:
- 3 Shrubs or under shrubs:
- 4 Leaf lets 4-5 pairs, pods pubescent . *longeracemosa*
- 4 Leaf lets 7 pairs, pod ... *colutea*
- 3 Prostrate or erect herbs ... *linnaei*

Plant Description

I. longeracemosa Boivin ex Baillon, Bull. Mens. Soc. L. Paris 1:399. 1883, Gamble 1:220.1918.

Subshrub, leaves odd pinnate, leaflets 4 or 5 pairs opposite, oblong, elliptic, glabrous above, pubescent below, base subacute, margin entire, apex obtuse, apiculate, racemes axillary, slender, up to 7 inches long,

more than 12 flowered. Calyx tube pubescent without, corolla pinkish, pod oblong, thick, shortly mucronate, about 6 seeded pubescent.

With the morphological features and keys available in identification, it is said to be a new addition to the flora of Andhra Pradesh.

CONCLUSION

Based on the literature related to the flora of Andhra Pradesh and particularly the district of Chittoor available so far, it can be concluded that the plant species of *Indigofera longeracemosa* is a new addition for the wealth of flora of Andhra Pradesh and Chittoor district in particular.

REFERENCES

- Gamble J, Fisher CE. Flora of Presidency of Madras. Vol. 1-3. Calcutta: Botanical Survey of India; 1957.
- Matthew KM. Flora of Tamil Nadu Karnatic. Vol. 1-3. Tiruchirapalli: The Rapinat Herbarium; 1981-1983.
- Pullaiah T, Yasoda N. Flora of Anantapur District. New Delhi: Bishan Singh Mahendrapal Singh; 1989.
- Pullaiah T, Chenchiah E. Flora of Andhra Pradesh. Vol. I. Jodhpur, India: Indian Scientific Publisher; 1997.
- Pullaiah T, Moulali A. Flora of Andhra Pradesh. Vol. II. Jodhpur, India: Indian Scientific Publisher; 1997.
- Pullaiah T. Flora of Andhra Pradesh. Vol. III. Jodhpur, India: Indian Scientific Publisher; 1997.
- Pullaiah T, Babu PS. Flora of Andhra Pradesh. Vol. IV. Jodhpur, India: Indian Scientific Publisher; 1997.
- Raju RV. Flora of Kurnool District, A.P., India, Ph. D. Thesis. Ananthapur, India S. K. University; 1987.
- Rangacharyulu D. Floristic studies of Chittoor District of Andhra Pradesh, Ph. D. Thesis. Tirupati, India: S. V. University; 1991.