

## Occurrence of *Alysicarpus saplianus* Pokle., (Fabaceae) in Satpuda range of Jalgaon district, Maharashtra, India

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### Abstract

The Jalgaon is one of the districts in the Khandesh region of North Maharashtra India with great diversity of plants. The present paper deals with addition of *Alysicarpus saplianus* Pokle., (Fabaceae), this species is reported for the first time from different parts of the Satpuda ranges of Jalgaon district, Maharashtra. Detailed taxonomic description, photographs and relevant informations are provided here for easy identification.

### INTRODUCTION

*Alysicarpus* Desv. is herbaceous legume genus. It comprises about 34 species and 20 infraspecific taxa distributed worldwide. The species are distributed in tropics and subtropics of the world, with maximum diversity in India, South Africa and Australia. It is also present in China, Malaysia, and Indonesia etc. In India diversity of taxa is more in Southern and Western states of India and gradually lesser towards Eastern states. The genus *Alysicarpus* Desv. is easy to identify but the identification of species is a bit critical. It is because of different taxonomic treatments, loose, confusing and erroneous terminologies used in different floras. In addition, vegetative characters in most of the species are quite variable. These characters include height, form, branching pattern, tomentum, leaf shape and size. All This led to different descriptions in different taxonomic literatures for the same species or taxon. Therefore the genus is wrongly considered as difficult and confusing one.

The genus is represented by 25-30 species in tropics and subtropics (Verdcourt, 1954); Ohashi *et al.* (1981). Santapau and Henry (1973) considered 45 taxa which included 15-20 infraspecific taxa. First consolidated account on

Indian taxa of *Alysicarpus* Desv. was given by Sanjappa (1992), wherein 18 species and 9 varieties i.e total 27 taxa have been enumerated. Besides transfer of infraspecific taxa, few taxa have been added by Indian taxonomists. Pokle (2017) provides a comprehensive account of 26 taxa (17 species, 9 varieties) of genus *Alysicarpus* Desv.

The vegetation of Satpuda range of Jalgaon district is quite varied and interesting. Jalgaon district lies between 20<sup>0</sup> and 21<sup>0</sup> North latitude and 74<sup>0</sup> 55' and 76<sup>0</sup> 28' East longitudes. The Jalgaon district has a total area about 272 sq. km. The total forest area in the district is 72685.27 hectares. On its location in the upper Tapi basin, it forms a distinct topographical unit separated from neighboring Madhya pradesh state by Satpura ranges and form the south by Satmala hilly ranges. The physiographic of the district is made up of high hill ranges on the north, alluvium in the centre and low hill ranges to the south of Tapi. On the north, the hill ranges stretch east-west and form part of the Satpuras, the highest peak being about 1175 meters. The forest of the Jalgaon district is of dry deciduous type. The vegetation varies with the changes in altitude, aspect and rainfall.

The study region though botanically rich in biodiversity have not been explored extensively except a few sporadic reports on floristic of Patil (2003), Kshirsagar (2008), Khan (2017) and Khan (2019).

While exploring the Satpuda range of Jalgaon district of Maharashtra, the author came across an interesting species of *Alysicarpus saplianus* Pokle., from Jalgaon district, Maharashtra. Which was first time collected and described by Pokle (1999) from Sapli Dam in Parbhani district and Specific epithet is based on locality of first collection i.e. Sapli Dam in Parbhani district. In Indian it is only reported from a few localities of Diu-Daman (Airport, R.D.Pataskar, 102702 BSI) and Karnataka (Manmanhara, P.G. Diwakar, 164214 BSI). During present *Alysicarpus saplianus* Pokle., is a new distributional records for Satpuda range of Jalgaon district of Maharashtra.

Through search of literature (Singh *et al.*, 2000; Patil, 2003; Kshirsagar, 2008 and Khan, 2019.) and consultation of BSI Herbarium Pune revealed that this species was not reported from Satpuda range of Maharashtra. This species is rare to Indian flora because it was collected from few localities of India. The voucher specimens are deposited in the herbarium of Department of Botany, H. J. Thim College of Arts and Science Mehrun, Jalgaon. Therefore, *Alysicarpus saplianus* Pokle., is reported here for the first time from Satpuda range of Jalgaon district of Maharashtra State. Detailed description and notes are provided here to facilitate easy identification.

#### TAXONOMIC TREATMENT

***Alysicarpus saplianus*** Pokle, Rendwardtia 11(4): 288-290.1999; Pokle, Genus *Alysicarpus* Desv. In India.136-138.2017.

Erect annual woody herbs 20-30 cm tall; stems and branches slender, brown, striate, woody, sparsely short hairy; nodes obscure, internodes shorter than leaves. Leaves glaucous green, thick; petioles short, channelled, 3-4 mm long; stipules 3-4 mm long, triangular, acute, striate, glabrescent, faint straw coloured; stipels absent: lamina 1.5-3.0 x

0.8-1.2 cm, ovate-oblong to oblong, obtuse, upper elongate, glabrous above, sparsely appressed-hairy along the nerves beneath, nerves prominent below. Inflorescence compact, extra-axillary and terminal; rachis pubescent, elongating in fruits up to 6 cm long; Flowers bicoloured, 6-10 pairs, exserted; pedicel short 1-1.5 mm; primary bracts 4-5 mm long, scarious, broadly ovate acute, green, glabrous, non-ciliate; secondary bracts absent; calyx 4.5-6 mm long, calyx glumaceous, green when fresh, deep brown when dry, thin, striate, spreading in fruits, tube very short, hardly 0.5 mm long, sepals glabrous, non-ciliate with a tuft of hairs at apex, anterior two almost united forming shallow notch; corolla exserted, spreading; standard lemon yellow, without blotch, claw short, 1-1.5 mm long, broadly ovate, apex almost entire with tiny notch; wing and keel petals 5.5-6.5 mm long, pink-purple; ovary glabrous, style bent, stigma sub capitate. Pods beaded, articles subglobose, broader and compressed, transversely plicated, turning black at maturity, epicarp thick, joints deep. Seeds ovate, unequal sided or elongate, non-mottled, dark brown, red-brown, or green, 1.30-1.87 x 1.03-1.26 x 0.98-1.09 mm.

**Flowering and Fruiting:** August-October

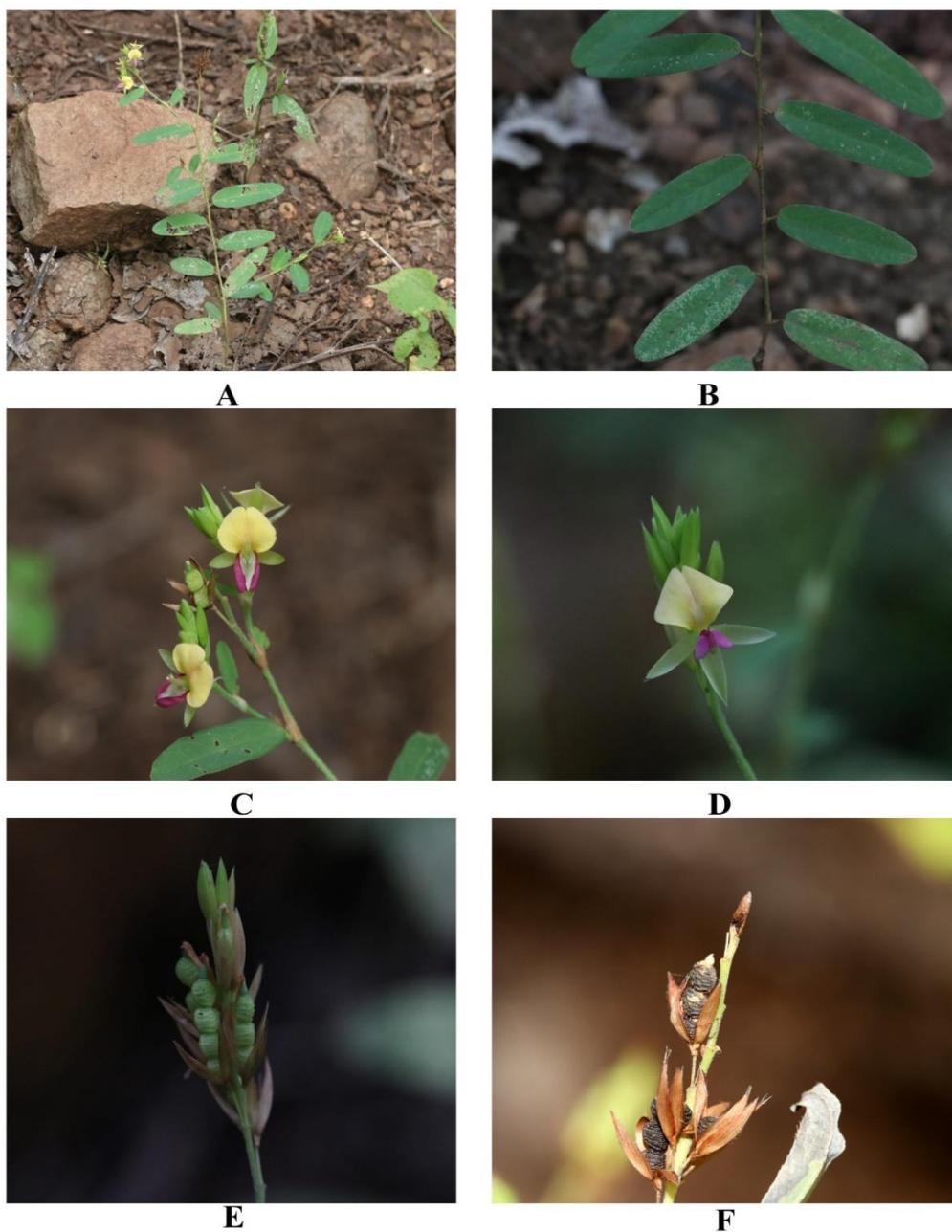
**GPS Reading:** N 21° 15' 55.93" E 75° 48' 57.91" (Elevation 631.3 m)

**Habitat:** Rare. On slopes of hills under shades of the tree.

**Distribution:** In India only reported from Diu-Daman (Airport, R.D.Pataskar, 102702 BSI), Karnataka (Manmanhara, P.G. Diwakar, 164214 BSI) and Maharashtra Bodhadi, Pokle, 77.

**Specimens examined:** India, Maharashtra, Jalgaon District Tidya: TAK 7931 (CAL), 04.10.2020; TAK 8015 (CAL), 08.10.2020, Marul forest, Near foot of hills in black soil.

**Note:** Similar to *Alysicarpus heyneanus* Wight & Arn. differing in much shorter habit; small thin leaves; unbranched short, few flowered inflorescence; thin and translucent calyx with all equal elliptic-obtuse lobes spreading in fruits; bicoloured' corolla.



**Figure:1. *Alysicarpus saplianus* Pokle. A. Habit B. Leaf C. Inflorescence D. Flower E. Fruit F. Mature fruit**

### Plate-I

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