

Ocimum filamentosum Forssk.: A New Record to the Flora of Rajasthan



Jyoti Singh

Assistant Professor,
Herbarium and laboratory of plant
taxonomy,
Dept. of Botany,
MLV Government College,
Bhilwara, Rajasthan, India



Kanhaiya Lal Meena

Associate Professor,
Herbarium and laboratory of plant
taxonomy,
Dept. of Botany,
MLV Government College,
Bhilwara, Rajasthan, India

Abstract

Ocimum filamentosum Forssk. of family Lamiaceae has been reported from the Mandal a tehsil of Bhilwara district, Rajasthan. Previously from the India, this species has been reported from Madhya Pradesh and Maharashtra. The phenological data, distribution in Rajasthan, and colour photographs of the species have been presented in this paper.

Keywords: *Ocimum filamentosum*, Newspecies, Rajasthan, India.

Introduction

Rajasthan is the largest State of the India. It is the arid region of India. The botanical explorations for the collection of angiospermic flora of Rajasthan has been conducted, during the survey authors found some interesting plant specimens of family lamiaceae, earlier that was not reported from other author of this state. The study area lies in central west part of the state and has hot summer and cold winter with low rain monsoon season. Natural vegetation of this tehsil composed of medium size trees, small shrubs, annual and perennial grasses and also cultivated agricultural field occurs in between the aravalli hills.

Review of Literature

Rajasthan is the largest State of India, occupying an area of about 3, 48, 861 sq. km i.e. nearly 11 percent of the total area of India. It forms the eastern extremity of the great arid and semi-arid belt of the world. During botanical explorations in southern Rajasthan, the authors collected some interesting plant specimens from Mandal tehsil (25°26' N Latitude and 74°35' E Longitude) in Bhilwara district of Rajasthan. After a thorough survey of literature (Pullaiah and Mohammed, 2000), critical examination and expert opinion from Botanical Survey of India, Arid Zone Regional Centre, Jodhpur, these specimens were determined as *Ocimum filamentosum* Forssk., belonging to the family Lamiaceae, a taxon not recorded by the earlier workers from Rajasthan (Bhandari 1987, Sharma and Tyagi 1979, Shetty and Pandey 1983, Singh 1983, Prasad et al. 1996, Sharma 2002, Tiagi and Aery 2007, Meena 2010a, b, 2013a, b, c, 2014a, b, Meena and Yadav 2010, Yadav and Meena 2011 and Meena 2013). Recently, Meena (2015) have further contributed to our knowledge about the flora of Rajasthan and added 28 species from southern Rajasthan. But *Ocimum filamentosum* Forssk. has not been reported so far from Rajasthan. Thus, the present paper provides description, phenology data and Photographs are provided to facilitate its easy identification in the field.

Aim of the study

Inventorisation of the flora of the Mandal tehsil, including the taxonomical study find out the angiosperms species of the study area and its categorization. The study carried out to prepare the flora with voucher specimen, and deposition of specimen in the herbarium, department of botany, MLV Government College, Bhilwara.

Research Design

Intensive and extensive Botanical exploration and exhaustive studies of the whole tehsil the angiospermic diversity, during 2015-2018 in different seasons so as to collect more and more plant specimens and information about wild flora of the area. The herbarium sheet is ready in its standard format, the collected plant specimens will be identified with the help of different recognized floras (such as Flora of India, Flora of Rajasthan), field

data, consultation of authentic herbarium specimens lodged in Herbaria, Botanical Survey of India, Jodhpur.

Observations

Ocimum filamentosum Forssk., Fl. Aegypt. Arab. 1081775. *Becium affine* var. *cyclophyllum* Chiov., Fl. Somalia 2: 367 1932. *B. knyanum* (Vatke) G.Taylor, J. Bot. 69(Suppl. 2): 146 1931. *B. obovatum* var. *knyanum* (Vatke) Cufod., Enum. Pl. Aeth. 850 1963. *O. abyssinicum* Lam., Encycl. 1: 387 1785. ***Ocimum adscendens*** Willd. Sp. Pl. 3: 166 1800. *O. calycosum* Hochst. ex Briq., Bot. Jahrb. Syst. 19: 161 1894. ***Orthosiphon adscendens*** Benth. ex Sweet, Hort. Brit. ed. 2: 413 1830. *Plectranthus indicus* (Roth) Spreng., Syst. Veg. 2: 691 1825. *Plectranthus menthoides* Willd., Neue Schriften Ges. Naturf. Freunde Berlin 4: 181 1803. (Plate 1A and B)

Annual erect herbs, 15-55 cm tall. Stem obtusely 4 angular, pubescent with retrorse hairs, diffusely branched. Leaves opposite, 1.9-4.2 x 1.6-2 cm, ovate- elliptic, cuneate to tapering at base, acute,

serrulate, glabrous and copiously dotted with oil globules on both surfaces; petioles 1-2.2 cm long. Racemes 3-5 cm long; verticillasters distant. Floral leaves linear-oblong, with a concave, glandular receptacle at base. Calyx tube 2.5 mm long, subglabrous to sparsely pubescent without, glabrous within; upper lip broadly ovate-oblong, to 6-9 mm long in fruit, slightly longer than the lower; lateral lobes of lower lip bimucronate or truncately serrated, median ones spinous-acuminate. Corolla 5-7 mm long, puberulous without, pinkish-white; upper lip 2-3 mm long, lower equally long. Stamens much exserted, filaments glabrous. Nutletstrigonous.

Ecological notes

Rarely reported from wastelands, near corners of forest.

Flowering and fruiting

July - October.

Distribution

India and Zimbabwe.



Plate 1. *Ocimum filamentosum* Forssk.: A. Habit, B. Flowering twig.

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Authors' Contributions:

Jyoti Singh and Kanhaiya Lal Meena surveyed the study area collected Plants specimens and observed the data from the field, Prepare voucher specimen and deposited to the herbarium, department of botany, MLV Government College, Bhilwara.

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