



Extended distributional record of genus *Isodon* from Nashik District

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Abstract

Isodon an important genus of family Lamiaceae was reported for the first time from Nashik District Maharashtra, India. Extended distribution of Two species out of the three species of *Isodon* reported for Maharashtra state, viz *Isodon lophanthoides* an Endemic species and *Isodon rugosus* reported only from Amravati district has been reported from Nashik District.

Keywords: *Isodon*, Nashik District, Extended distribution, Endemic species

Introduction

Family Lamiaceae is represented by sixteen species in Nashik district. *Isodon* an important genus containing diterpenoids and used for treating many genera represented by hundred species and a new species has recently reported from Eastern Himalayas India in 2022, was not recorded from Nashik District. During the explorations of the Flora of Nashik District, two species of *Isodon* namely *Isodon rugosus* and *Isodon lophanthoides* were reported from Indrai wadi, Chandwad Tehsil and Ambewadi, and Bhaskargad in Igatpuri tehsil.

Material and Method

Study Area - Nashik District is located in North Maharashtra, India between 18.33 degree and 20.53-degree North latitude and between 73.16 degree and 75.16-degree East Longitude. The western side is flanked by Western Ghats, central part is traversed by Satmala ranges and in the northern part the Selbari and Dholbari ranges. The district is Divided in to thirteen tehsils. Igatpuri, Trimbakeshwar, Peth Surgana receives good amount of rainfall, where as rest of the area comes under rain shadow region. Major rivers are Vaitarna, Darna, Godavari, and Girna. In fact, the district can be divided in two river basins the Godavari basin and Girna Basin.

Excursions were carried out in different parts of the district in different seasons, plants were photographed and identified with the help of research papers, floras and websites.

Observations

A brief description of the two species of *Isodon* reported during the study.

Isodon rugosus (Wall. ex Benth.) Codd I. *rugosus* (Wall.) Codd in Taxon 17: 239. 1968; Li in J. Arnold Arbor. 69: 340. 1988. *Plectranthus rugosus* Wall. Pl. As. Rar. 2: 17. 1830; Hook. f. Fl. Brit. India 4: 620. 1885; Mukerjee in Rec.

Bot. Surv. India 14(1): 47. 1940.

Much branched Subshrubs; branches subcylindrical, grey brown, covered by soft tomentose hairs, branchlets obtusely quadrangular, finely striate and densely stellate tomentose. Leaves ovate or elliptic, chartaceous, rugose, densely tomentose, apex obtuse, base broadly cuneate or subrotund, margins crenate above. Flowers arranged in loose slender cymes, Corolla white tinged rose or dark lilac upper lip; calyx campanulate, c 0.2 cm long, densely stellate tomentose outside, fruiting calyx c 0.3 cm long; corolla c 0.7 cm long, upper lip reflexed, 4 lobed at apex, lower one broadly ovate. Nutlets pale brown, oblong, triquetrous.

Fls. & Frts.: September November

Location - On Hill slopes Indraiwadi, Chandwad tehsil, *Isodon lophanthoides* (Buch. -Ham. ex D. Don) H. Hara in J. Jap. Bot. 60: 235. 1985; Li in J. Arnold Arbor. 69: 334. 1988. *Hyssopus lophanthoides* Buch-. Ham. ex D. Don, Prodr. Fl. Nepal. 110. 1825. *Plectranthus stocksii* Hook. f. Fl. Brit. India 4: 618. 1885; Cooke, Fl. Pres. Bombay 2: 528. 1958 (Repr.); Mukerjee in Rec. Bot. Surv. India 14(1): 43. 1940. *P. striatus* Bth. in Wall. Pl. As. Rar. 2: 17. 1830; Hook.f.op. cit. 618.

var. *lophanthoides*.

Small slender perennial herbs, stem quadrangular, furrowed, Hairy. Leaves opposite petiolate, broadly ovate thin, chartaceous, Base rounded apex pointed, margins toothed. Flowers small in branched terminal panicles. Corolla white or rose with purple spots on limbs; bracts sessile; calyx campanulate, sparingly villous on lower part, Nutlets ovoid smooth brown.

Fls. & Frts: September -November.

Present distribution Ambewadi, Bhaskargad (Igatpuri)

Earlier Distrib: Ahmednagar, Mumbai, Pune, Raigad, Ratnagiri, Satara, Sindhudurg,



Isodon rugosus (Wall. ex Benth.) Codd



Isodon lophanthoides Var **lophanthoides** (Buch. -Ham. ex D. Don) H. Hara

Result and Discussion

Two species of *Isodon* were reported during the study from the study area out of which *Isodon rugosus* was previously reported only from Amravati in Maharashtra state. Because of its geographic location of Nashik should be further explored or recording other important species earlier not recorded which would be important for conservation apart from other uses.

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