



Original Research Article

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## *Theriophonum minutum* (Willd.) Baillon (Araceae) - New to Khandesh Region of Maharashtra, India

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### Article Info

### Abstract

#### Keywords:

New addition,  
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flora Jalgaon,  
Khandesh

While exploring the floral wealth of the district in Short trips to the localities of Jalgaon district in 2022-23 authors came across *Theriophonum minutum* (Willd.) Baillon reported for the first time from dist. Jalgaon Maharashtra. Perusal of literature shows the reports of it from various parts of country such as Andhra Pradesh, Maharashtra, Odisha, Tamil Nadu, Telangana and Karnataka. Species can be easily identified on the basis of habit and position of two types of sterile flowers and staminate flowers in the spadix enclosed in spathe. Its Taxonomy and distribution with color photographs are discussed here for easy identification.

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### Introduction

Araceae Juss. family of monocotyledonous flowering plants known as arum family comprising 140 genera and about 4075 known species found distributed in tropics and subtropics (Christenhusz *et al.*, 2016). The genus *Theriophonum* Blume is represented by ca. 100 species in the world. In India, the genus is represented by five species which are confined to the south and central parts, while there is only one species in Sri Lanka and four species in India (Sivadasan and Nicolson, 1982; Sivadasan *et al.*, 2014).

While exploring the floristic wealth of district Jalgaon, Maharashtra species of *Theriophonum* Blume was collected in Chalisgaon tehsil of district Jalgaon, Maharashtra. Earlier Kshirsagar and Patil (2008) documented flora of Jalgaon District with 813 species from 105 family including 442 genera. Afterwards, some workers under botanical explorations in the district worked out with many further additions to the flora of Jalgaon district, Maharashtra (Khan *et al.*, 2020a and 2020b; Sonawane *et al.*, 2020a, 2021a, 2021b, 2022a and 2022b; Undirwade, 2020a, 2020b, 2021a and 2021b; Undirwade and Bhuktar, 2022).

After a critical examination and review, with standard literatures and floras, research papers and reports viz., Flora of Jalgaon District, Maharashtra (Kshirsagar and Patil, 2008), Flora of Dhule and Nadurbar District (Maharashtra) (Patil, 2003), Flora of Maharashtra (Almeida, 2009), and Ranganagouda *et al.* (2022) (Research article), it was identified as *Theriophonum minutum* (Willd.) Baillon. Till date, this species is not reported from any of the districts of Khandesh region of North Maharashtra. Hence, the present collection is new addition to the flora of Jalgaon district and Khandesh region.

### Taxonomic Treatment

*Theriophonum minutum* (Willd.) Baillon. Hist. Pl. 13:457 (1895); Engler, Pflanzenr.(IV. 23F) 73: 105 (1920); Alston in Trimen, Handb.Fl. Ceylon 6: 294 (1931); Fischer in Gamble, Fl. Madras 3: 1579 (1931). Almeida, Fl. Savantwadi 2:57, 1990;Blatter in JBNHS 35:24,1931; Sivdasan& Nicolson in Kew Bull. 37: 285, 1982; Lakshminarsimhan in Sharma *et al.*, Fl. Maharashtra (Monocot.) 222, 1996 (Fig. 1).

Small cormous herb, about 40-60 cm in height. Underground tubersubglobose, 1-2 cm long, 3-5 cm in diameter. Leaves with petioles 10-14 cm long; leaves highly variable, usually trilobed to hastate: broad-leaved specimens with central lobe 2-4up to 5 cm and lateral lobes 1-3 up to 2 cm; Peduncles2-5 cm. Spathe12-16 cm long, the basal portion convolute, 2-3 cm long, blade greenish-purplish, not flattened, convolute, with purple blotch at base, margins wavy, purplish. Spadix shorter than spathe, 6-8 cm long, with a basal pistillate portion ca.0-3 cm long, flowers are arranged more or less in single whorl, green, each unilocular with 2-4 basal and apical ovules; stigma sessile, discoid.

First sterile portion is short, subulate, ca 3-5 mm long, wiry, orange colored with acute tips, followed by staminate portion 1-1.5 cm long, flowers are scattered, sessile, with two anther-lobes, the connective truncate to strongly beaked, beak ca.2 mm long, variable. A second sterile portion, 1 cm long, flowers much smaller than first (lower) sterile flowers, ca 1-3 mm long, white- creamy. Appendage 3-3.5 cm long, brownish, becomes warty at maturity. Green berries in aggregates of 7-10 on deflexed peduncles, subconical. Seeds usually 2-3, shiny; broadly ovoid to obovoid with white basal tissue.

### Key for identification of species

Spadix with sterile flowers above and below the staminate flower..... *T. minutum*

### Flowering and fruiting

July - October

### Distribution

Found growing in shady places on plains, occasional along ditches. Mostly found sheltered under the *Gymnosporia senegalensis* (Lam.) Loes., and along with *Curculigo orchioides* Gaertn.

### Distribution in Maharashtra

Found its occurrence at Savantwadi, Mumbai & Sindhudurg. As well in Yawatmal & Gondia from Vidarbha region.

### Associated plants

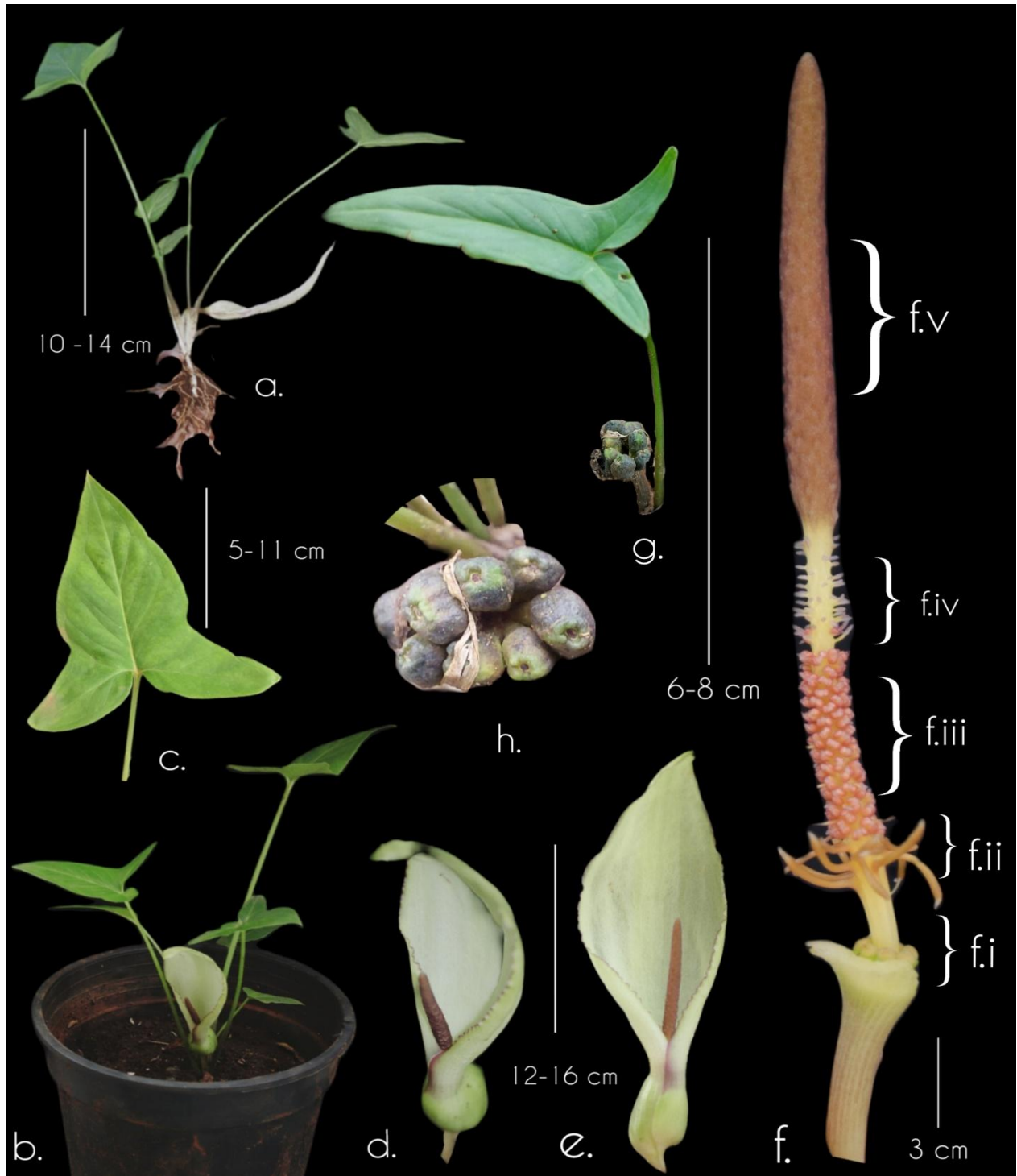
*Embllica urinaria* (L.) R.W. Bouman, *Cathetus simplex* (Retz.) R.W. Bouman, *Euphorbia hirta* L., *Moerorisamara* (Schumach. & Thonn.) R.W. Bouman, *Evolvulus alsinoides* (L.) L., *Leucas aspera* (Willd.) Link, *Lepidagathis cristata* Willd., *Ruellia prostrata* Poir., *Senna auriculata* (L.) Roxb., *Alternanthera ficoidea* (L.) P. Beauv.

### Conservational status

As the species in Maharashtra is rare in its occurrence, it should have to be conserved.

### Results and Discussion

Till date, a total of five species of genus *Theriophonum* are reported from India, among them 3 are endemic to peninsular India (previously it was four), viz., *T. fischeri* Sivadasan (1981), *T. infaustum* N.E. Brown (1881) and *T. sivaganganum* (Raman & Seb.) Bogner (1968). Since the two species described viz., *T. danielii* and *T. manickamii* are unequivocally recognized as conspecific with *T. infaustum* and *T. fischeri*. Later two species are reported from Maharashtra with their extended distribution, *T. minutum* (Willd.) Baillon. (1895); (Almeida, 2009) and *T. dalzellii* Schott. (1885) (Kshirsagar and Patil, 2008).



**Fig. 1:** *Theriophonum minutum* (Willd.) Baillon. **a.** Habit, **b.** Plant with inflorescence (Conserved), **c.** Leaf, **d.** Inflorescence side view, **e.** Spathe, **f.** Spadix with flowers, **f.i.** Pistillate flowers, **f.ii.** First sterile flowers (lower), **f.iii.** Staminate flowers, **f.iv.** Second sterile flowers, **f.v.** Appendix, **g.** and **h.** Berries.

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