

SPECIES

To Cite:

Gajbe PU. A new record of mygalomorph spider *Tigidia konkanensis* Mirza, Zende & Patil, 2016 (Araneae: Barychelidae) from Raigad District, Maharashtra, India. *Species* 2023; 24: e58s1557
doi: <https://doi.org/10.54905/diss.v24i74.e58s1557>

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Peer-Review History

Received: 21 May 2023

Reviewed & Revised: 25/May/2023 to 22/June/2023

Accepted: 26 June 2023

Published: 02 July 2023

Peer-Review Model

External peer-review was done through double-blind method.

Species

pISSN 2319-5746; eISSN 2319-5754



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A new record of mygalomorph spider *Tigidia konkanensis* Mirza, Zende & Patil, 2016 (Araneae: Barychelidae) from Raigad District, Maharashtra, India

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ABSTRACT

Tigidia Simon, (1892) is a genus of mygalomorph spiders that belongs to family Barychelidae. *Tigidia konkanensis* Mirza, Zende & Patil, 2016 is among the seven species of this genus found in India. *T. konkanensis* is so far known only from its type locality in Ratnagiri district of Maharashtra, India. A new record of this species from Raigad district of Maharashtra is provided here.

Keywords: Arachnida, faunal diversity, Konkan, Mygalomorphae.

1. INTRODUCTION

Currently, 51090 species of spiders in 4314 genera of 132 families are known from the world (WSC, 2023a). The vast majority of these spiders belong to the two major suborders Araneomorphae and Mygalomorphae, of which, the primitive spiders or mygalomorphs, use their silk in a rudimentary manner compared to modern web-weavers and they prey primarily on non-flying arthropods (Maggio et al., 2005). The Neotropical region, the southern part of Africa and Australasia are having a good diversity of mygalomorph spiders (Pérez-Miles and Perafán, 2017).

Despite their relatively larger size, mygalomorph spiders are non-aggressive and pose no health problem (Lucas et al., 1994). Being sedentary by nature, their dispersal is limited and this makes them good subjects for bio geographical studies of historical nature (Pérez-Miles and Perafán, 2017). The brushed trapdoor spider genus *Tigidia* belongs to the mygalomorph family Barychelidae. This genus was first described by Simon, (1892). Presently, 14 species of genus *Tigidia* are known from the world and these species are distributed in three countries: India, Madagascar and Mauritius (WSC, 2023b).

2. METHODOLOGY

Raigad district (Figure 1) is located in the Konkan region in the western part of Maharashtra, India. It is bounded by Arabian Sea to the west and Ratnagiri district to the south. During a visit to Kandalgaon village (Coordinates:

18°21'13.5"N 73°19'32.2"E) in Raigad district on 16 November 2022, a mygalomorph spider was spotted moving on the ground. The spider was photographed and identified as a male specimen of *Tigidia konkanensis* (Figure 2). The identification was made on the basis of external characteristics using the following scientific literature: Mirza et al., (2016), Mirza, (2023) and Siliwal et al., (2011).



Figure 1 Location of Raigad district in Maharashtra



Figure 2 *Tigidia konkanensis*

3. RESULTS AND DISCUSSION

The genus *Tigidia* Simon, (1892) was first recorded from India by Siliwal et al., (2011) who described three new species of *Tigidia* spiders from the Western Ghats. These three species include *T. sahyadri* from Karnataka, *T. nilgiriensis* and *T. rutilofronis* from Tamil Nadu. Another species *T. konkanensis* was described from Ratnagiri district, Maharashtra (Mirza et al., 2016). Recently, three more

species of *Tigidia* have been described from three different places in India, namely, *T. jalgaonensis* from Maharashtra, *T. tangerina* from Karnataka and *T. fasciata* from Kerala (Mirza, 2023).

Overall, seven species of *Tigidia* are currently known from India. The species, *T. konkanensis* is so far known only from its type locality, which lies in Ratnagiri district of Maharashtra. As Raigad district lies to the north of Ratnagiri, the presence of *T. konkanensis* in Raigad reveals that this species is distributed over a larger range.

4. CONCLUSION

The mygalomorph spider species *T. konkanensis* is distributed in Ratnagiri and Raigad districts in the Konkan region of Maharashtra. Further research is required to know more about the ecology of this species.

Acknowledgements

The author is thankful to the Principal, SM Mohota College of Science, Nagpur for facilities.

Ethical approval & declaration

In this article, as per the animal regulations in Department of Zoology, Shri Mathuradas Mohota College of Science, Maharashtra, India, the authors observed the mygalomorph spider *Tigidia konkanensis* Mirza, Zende & Patil, 2016 (Araneae: Barychelidae) from Raigad District, Maharashtra, India. The Animal ethical guidelines are followed in the study for species observation, identification & experimentation.

Informed consent

Not applicable.

Conflicts of interests

The authors declare that there are no conflicts of interests.

Funding

The study has not received any external funding.

Data and materials availability

All data associated with this study are present in the paper.

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