

Journal of Entomology and Zoology Studies

Available online at www.entomoljournal.com



E-ISSN: 2320-7078 P-ISSN: 2349-6800

www.entomoljournal.com JEZS 2023; 11(5): 126-129

© 2023 JEZS Received: 05-08-2023 Accepted: 02-09-2023

Vijaykumar S Gadekar

Department of Zoology, Sangola College, Sangola, Solapur, Maharashtra, India

Sanjay J Sawant

Vanshree Foundation Sindhudurg, Aynode-Dodamarg, Sindhudurg District, Maharashtra, India

Aishwarya S Naik

Department of Zoology, ADK Science College, Dodamarg, Sindhudurg District, Maharashtra, India

SV More

Department of Zoology, ADK Science College, Dodamarg, Sindhudurg District, Maharashtra, India

Corresponding Author: SV More

Department of Zoology, ADK Science College, Dodamarg, Sindhudurg District, Maharashtra, India

Partial checklist of long-horned beetles (Coleoptera: Cerambycidae) of Goa state, India

Vijaykumar S Gadekar, Sanjay J Sawant, Aishwarya S Naik and SV More

DOI: https://doi.org/10.22271/j.ento.2023.v11.i5b.9241

Abstract

A partial checklist with ten species under ten genera of four subfamilies of Cerambycidae from the Western Ghats of Goa state is presented. Out of these ten species of long-horned beetles, five species viz., Batocera rufomaculata (DeGeer, 1775), Tetraglenes hirticornis (Fabricius, 1798), Cyrtonops punctipennis (White, 1853), Acalolepta nivosa (White, 1858) and Xylotrechus smei (Castelnau & Gory, 1841) are reported for the first time from Goa. Among the four subfamilies, the Lamiinae is represented by five species, followed by Cerambycinae with three species, while Disteniinae and Prioninae are represented by one each. Images of some species in their natural habitat are provided along with updated information on their current geographical distribution.

Keywords: Geographical distribution, wood boring beetles, checklist, Western Ghats, Goa

Introduction

Goa state, which is one of the smallest states in India, is located on the Western coast of the Indian peninsula, which is generally considered the Northern Western Ghats. Goa state is divided into only two Districts, south and north Goa, which is further divided into twelve Tehsils. The study region is represented by two biomes: the Arabian Sea and the Western Ghats. The study area is bound between the borders of the Maharashtra and Karnataka States. The species of longhorn beetles are one of the important coleopteran groups that include one of the maximum insect diversity, represented by more than 36,000 described species under eight subfamilies (Monne et al., 2017) [1]. The name of the family originates from the old Greek word 'Kerambyx' meaning a horned beetle; hence, they are commonly called as longhorn beetles. The longhorn beetles are a phytophagous group that can be pestiferous on cultivated as well as forest trees. However, they are also one of the important groups involved in the recycling of fallen wood mass in forest ecosystems. Hence, these beetles are pertinent to study for their economic and ecological importance. The only comprehensive taxonomic work on Indian Cerambycidae was published by Gahan in 1906 [2], wherein he included a total of 396 species of Cerambycids from the Indian subcontinent, excluding the subfamily Lamiinae. In recent times, Kariyanna et al. (2017) [4] provided a checklist of 1536 species of longicorn beetles under eight subfamilies and 440 genera. However, the information on longhorn beetles from Goa has remained under-reported in both classical as well as modern literature on the group. Hence, the present study provides a taxonomic account of ten species of longhorn beetles from Goa state. Five species are reported for the first time from Goa. The survey was conducted from the year 2021 to 2022 in the different localities of Goa state. The specimens observed in their native habitat were photographed and later identified by comparing them with the descriptions provided by (Gahan, 1906) [2] and (Tavakilian, and Chevillotte, 2022) [3]. And some species were identified by Dr. Sangmesh Hiremath Department of Agricultural Entomology, College of Agriculture, Vellayani Trivandrum.

Systematic account

Subfamily: Lamiinae Latreille, 1825 Tribe: Lamiini Latreille, 1825

1. Celosterna scabrator (Fabricius, 1781) 1964. Lamia scabrator Fabricius, 1781: 224; Zimsen, p.167 1964. Lamia spinator Fabricius, 1798: 145; Zimsen, p.167.

Distribution: India: Chhattisgarh, Goa, Himachal Pradesh, Karnataka, Maharashtra, Orissa, Tamil Nadu, Uttar Pradesh, and West Bengal. Elsewhere: Ceylon, Laos, Nepal, Pakistan, and Vietnam.

Remarks: The species was recorded from Goa by More and Prashanth (2019) [6].

2. Acalolepta nivosa (White, 1858)

1858. Monohammus nivosus White, p. 409.

Distribution: India: Goa, Karnataka, Kerala Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu, and Utter Pradesh. Elsewhere: Myanmar, Nepal, Pakistan, Sri Lanka.

Remarks: First record from Goa state.

Tribe: Batocerini Thomson, 1864

3. Batocera rufomaculata (DeGeer, 1775) 1775. Cerambyx rufomaculatus DeGeer, p.107.

Distribution: India: Andaman Island, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Jammu and Kashmir, Karnataka, Maharashtra, Madhya Pradesh, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, Tamil Nadu, Tripura, Utter Pradesh, and West Bengal. Elsewhere: China, Comoros, East Turkey, Egypt, Iran, Israel, Lebanon, Madagascar, Mauritius, Oman, Pakistan, Syria, Thailand, and Yemen.

Remarks: First record from Goa state. Tribe: Dorcaschematini Thomson, 1860 4. Olenecamptus bilobus (Fabricius, 1801) 1801. Saperda biloba Fabricius, Bibl. Acad. Nov. 2: 324.

Distribution: India: Arunachal Pradesh, Assam, Andaman, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Meghalaya, Manipur, Madhya Pradesh, Odisha, Punjab, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Utter Pradesh, and West Bengal. Elsewhere: Ambon, Australia, Bacan, Bismarck, Borneo, Comoros, New Guinea Island, Java Japan, Laos, Madagascar, Micronesia, Malayan Peninsula, Myanmar, Nepal, Pakistan, Palaearctic, Seychelles, Sri Lanka, Subtropical China, Sulawesi, Sutra, Taiwan, Thailand, Timor, Vanuatu, Vietnam.

Remark: The species was recorded from Goa by Gadekar et al. (2022)^[5].

Tribe: Agapanthiini Mulsant, 1839

5. Tetraglenes hirticornis (Fabricius, 1798) 1798. Saperda hirticornis Fabricius, p.148.

Distribution: India: Goa, Maharashtra, Manipur, Meghalaya, Nagaland, Sikkim, and West Bengal. Elsewhere: China, Indochina and Indonesia, Laos, Myanmar, Nepal, Thailand, Tonkin, and Vietnam.

Remarks: First record from Goa state. Subfamily: Cerambycinae Latreille, 1802 Tribe: Pyrestini Lacordaire, 1869 6. Pachylocerus corallinus Hope, 1834 1834. Pachylocerus corallinus Hope, p.19 Distribution: India: Goa, Maharashtra and Tamil Nadu.

Remarks: The species was recorded from Goa by Sen et al., (2005).

Tribe: Cerambycini Latreille, 1802

7. Trirachys holosericeus (Fabricius, 1787) 1787. Cerambyx holosericeus Fabricius, p.135

Distribution: India: Assam, Andaman Island, Arunachal Pradesh, Andhra Pradesh, Jammu Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Nicobar Island, Nagaland, Punjab, Rajasthan, and Tamil Nadu. Elsewhere: China, Indonesia, Laos, Myanmar, Malaysia, Pakistan, Sri Lanka, Thailand, and Vietnam.

Remarks: The species was recorded from Goa by Naik and More (2020)^[7].

Tribe: Clytini Mulsant, 1839

8. Xylotrechus smei (Castelnau & Gory, 1841)

1841. Clytus smei Laporte de Castelnau & Gory, p.37

Distribution: India: Assam, Bihar, Chhattisgarh, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Punjab, Tamil Nadu, Uttarakhand, and West Bengal. Elsewhere: Afghanistan, Bhutan, Damar, Myanmar, Nepal, Thailand, and Tanzania.

Remarks: First record from Goa state.

Subfamily: Prioninae Latreille, 1802 Tribe: Prionini Latreille, 1802

9. Priotyrannus mordax (White, 1853)

Prionus mordax White, 1853: 18.

Type Locality: India (HT); BMNH.

1857. *Priotyrannus mordax* Thomson, p.121

Distribution: India: Goa, Karnataka, Kerala, Maharashtra, and Tamil Nadu.

Remark: The species was recorded from Goa by Sen et al., $(2005)^{[8]}$.

Subfamily: Disteniinae Thomson, 1861 Tribe: Cyrtonopini Gressitt, 1940

10. Cyrtonops punctipennis White, 1853

1853. Cyrtonops punctipennis White, p. 29

Distribution: India: Assam, Goa, Himalayas, Maharashtra. Elsewhere: Borneo, China, Indonesia, Laos, Myanmar, Malaysia, Nepal, Tibet? and Taiwan.

Remark: First record from Goa state.

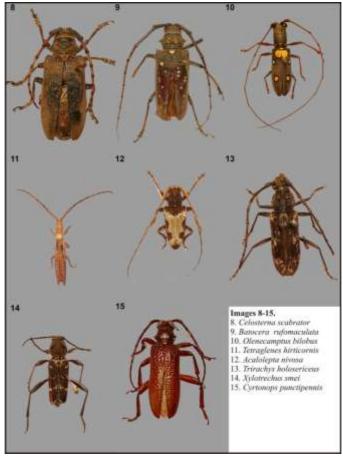
Discussion

A total of ten species of longicorn beetles under four subfamilies and ten genera are documented in this current check-list from Goa state up to 2022. The previous reports of longhorn beetles from Goa included Priotyrannus mordax, Pachylocerus corallinus, Celosterna scabrator, Trirachys holosericeus and Olenecamptus bilobus (Sen et al., 2005; More and Prashanth, 2019; Naik and More, 2020; Gadekar et al, 2022) [5, 6, 7, 8].

Five species are reported for the first time from Goa state. Among the subfamilies, Lamiinae are represented by 5 species under 5 genera, viz., Celosterna scabrator, Batocera rufomaculata, Olenecamptus bilobus, Tetraglenes hirticornis and Acalolepta nivosa. Of them, Batocera rufomaculata, Tetraglenes hirticornis, and Acalolepta nivosa are reported for the first time from Goa State. Pachylocerus corallinus, Trirachys holosericeus and Xylotrechus smei belonging to the subfamily Cerambycinae were recorded. *Xylotrechus smei* is reported for the first time from the study area. *Priotyrannus mordax* under the subfamily Prioninae and *Cyrtonops*

punctipennis belonging to the subfamily Disteniinae were recorded. The latter is the first report from Goa.





Acknowledgments

The authors are extremely grateful to Dr. Sangamesh Hiremath, Department of Agricultural Entomology, College of Agriculture, Vellayani Trivandrum, who helped in the identification, and also read the first draft of this partial checklist and provided us with very valuable suggestions. The authors are grateful to the authorities of ADK Science College, Dodamarg for their facilities and encouragement.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Monne ML, Monne MA, Wang Q. General morphology, classification and biology of Cerambycidae. In: Wang, Q. (Eds.), Cerambycidae of the World: Biology and Pest Management. CRC Press, Boca Raton, FL; c2017. p. 1-76.
- Gahan CJ. Fauna of British India Including Ceylon and Burma, Coleoptera, (Cerambycidae). Taylor and Francis, London. 1906;1:329.
- 3. Tavakilian GL, Chevillotte H. Titan: Base de donnees internationales sur les Cerambycidae ou Longicornes; c2022. Available: http://titan.gbif.fr. Access: 28/07/2022.
- 4. Kariyanna B, Mohan M, Gupta R, Vitali F. The checklist of longhorn beetles (Coleoptera: Cerambycidae) from India. Zootaxa. 2017;4345(1):1-317.
- Gadekar VS, Naik PS, More SV. First report of Olenecamptus bilobus Fabricius, 1801 (Coleoptera: Cerambycidae) from Goa, India. Journal of Applied Entomologist. 2022;2(2):12-13.
- 6. More SV, Prashanth MS. Report of *Celosterna scabrator* (Fabricius, 1781) (Coleoptera: Cerambycidae: Lamiinae) from Goa, India. Entomon. 2019;44(3):225-228.
- 7. Naik PS, More SV. First report of *Aeolesthes holosericea* (Fabricius, 1787) (Cerambycidae: Lamiinae) from Goa, India. Entomon. 2020;44(4):307-308.
- 8. Sen A, Rangnekar S, Rangnekar P, Ghate HV. Record of *Priotyrannus mordax* (White) and *Pachylocerus corallinus* Hope (Coleoptera: Cerambycidae) from Goa. Zoos' Print Journal. 2005;20(5):1869-1870.