

An updated checklist of Silverfish fauna (Insecta: Apterygota: Zygentoma) of India

*A.K. Hazra¹, D. Jana² and G.P. Mandal¹

¹Zoological Survey of India, Kolkata, West Bengal, India.

²PG Department of Zoology, Vidyasagar College (University of Calcutta), Salt Lake, Kolkata, West Bengal, India.

(Email: dr.ashishazra@gmail.com)

Abstract

An updated checklist of *Zygentoma* fauna from India is provided herewith. Altogether 22 species under 15 genera grouped in two families with their distribution records in India plus 2 species inquirenda are listed.

Keywords: *Silverfish, Zygentoma, Checklist, Lepisma, India.*

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Introduction

The order *Zygentoma* (commonly known as silverfish), represent one of the earliest insect. They are considered to be the sister group of the winged insects (Blanke *et al.*, 2014). The name *Zygentoma* Börner, 1904 is used at present by all the taxonomists working on this group. The name “Thysanura” was originally created for an order that included, the *Zygentoma*, the *Microcoryphia*, the *Diplura* at different times, and even the *Collembola* (Gaju-Ricart *et al.*, 2015). The first silverfish described, was the European lepismatid household pest *Lepisma saccharina* Linnaeus, 1758. Gervais (1844) described the first soil-dwelling Nicoletiid, *Nicoletia phytophila*, considering its elongate form, without scales and eyes. So far, 625 species have been described worldwide under 5 families with 148 genera (Smith, 2018).

Escherich (1903) described the first Indian Lepismatid *Lepisma indica* from Matheran, Maharashtra, later Mendes (1988) have considered this as species inquirenda. Another species *Lepisma devadasi* Sukumar & Livingstone, 1993 has also been considered as species inquirenda (Smith, 2018). Escherich (1905, 1906), Silvestri (1913, 1935, 1938), Paclt (1961, 1967), Joseph & Mathad (1963), Hazra (1980, 1993, 1996, 2000, 2004, 2012), Mendes (1989, 1992), Hazra and Mandal (2004a, b & 2010) contributed to the knowledge of Indian *Zygentoma*. Subsequently

Hazra and Mandal (2007) published a pictorial handbook of Indian Thysanura. Mandal (2010) published a check list of Indian Thysanura.

The poorly known Indian fauna of *Zygentoma* is represented by 22 species under 2 families with 15 genera within which the family Lepismatidae represents a total of 12 species belonging to 8 genera plus 2 species inquirenda. The aim of the present communication is to provide an up to date list of *Zygentoma* fauna of India with distribution records.

Updated Checklist of *Zygentoma* from India

The detail updated checklist is provided herewith. Distribution records of species are based on published work of earlier authors.

Class Insecta

Order *Zygentoma* Börner, 1904

Family Lepismatidae (Latreille, 1802)

Subfamily Acrotelsatinae Mendes, 1991

Genus *Acrotelsa* Escherich, 1905

1. *Acrotelsa collaris* (Fabricius, 1793)

Distribution: Andhra Pradesh, Uttarakhand, West Bengal

Subfamily Ctenolepismatinae Mendes, 1991

Genus *Acrotelsella* Silvestri, 1935

2. *Acrotelsella wygodzinsky* (Hazra, 1980)

Distribution: West Bengal

Genus *Ctenolepisma* Escherich, 1905

Subgenus *Ctenolepisma* Escherich, 1905

3. *Ctenolepisma* (*Ctenolepisma*) *alticola* Silvestri, 1935

Distribution: Jharkhand, Ladakh

4. *Ctenolepisma* (*Ctenolepisma*) *boettgerianum* Paclt, 1961

Distribution: Chhattisgarh, Gujarat, Madhya Pradesh, Maharashtra

5. *Ctenolepisma* (*Ctenolepisma*) *longicaudatum* Escherich, 1905

Distribution: Andaman & Nicobar Island, Andhra Pradesh, Manipur, Uttar Pradesh, Uttarakhand, Tripura, West Bengal

6. *Ctenolepisma* (*Ctenolepisma*) *nigra* (Oudemans, 1890)

Distribution: West Bengal

7. *Ctenolepisma* (*Ctenolepisma*) *tripurensis* Hazra, Biswas & Mitra, 2000

Distribution: Tripura

Genus *Thermobia* Bergroth, 1890

8. *Thermobia domestica* (Packard, 1873)

Distribution: Mandapam (Tamil Nadu)

Subfamily Lepismatinae (Latreille, 1802)

Genus *Afrolepisma* Mendes, 1981

9. *Afrolepisma nigrina* (Silvestri, 1913)

Distribution: Odisha

Genus *Lepisma* Linnaeus, 1758

10. *Lepisma saccharina* Linnaeus, 1758

Distribution: Sikkim, Uttarakhand

Genus *Tricholepisma* Paclt, 1967

11. *Tricholepisma gravelyi* (Silvestri, 1913)

Distribution: West Bengal

Genus *Xenolepisma* Mendes, 1981

12. *Xenolepisma subnigrina* (Silvestri, 1938)

Distribution: Tamil Nadu

Family Nicoletiidae (Lubbock, 1873)

Subfamily Atelurinae Remington, 1954

Tribe Atelurini Remington, 1954

Genus *Assmuthia* Escherich, 1906

13. *Assmuthia inermis* Escherich, 1906

Distribution: Maharashtra

14. *Assmuthia spinosissima* Escherich, 1906

Distribution: Maharashtra

Genus *Atelurodes* Silvestri, 1916

15. *Atelurodes typhloponis* (Silvestri, 1913)

Distribution: Uttarakhand, West Bengal

Genus *Bharatatelura* Mendes, 1992

16. *Bharatatelura malabarica* Mendes, 1992

Distribution: Goa, Haryana, Delhi, Maharashtra.

Genus *Neatelura* Joseph & Mathad, 1963

17. *Neatelura yellapurensis* Joseph & Mathad, 1963

Distribution: Karnataka

Genus *Platystylea* Escherich, 1906

18. *Platystylea barbifer* Escherich, 1906

Distribution: Maharashtra)

Tribe Atopatelurini Mendes, 2012

Genus *Pseudogastrotheus* Mendes, 2003

19. *Pseudogastrotheus indicus* (Silvestri, 1913)

Distribution: Odisha, Karnataka

20. *Pseudogastrotheus palpiseta* (Silvestri, 1916)

Distribution: Karnataka

Subfamily Coletiniinae Mendes, 1988

Genus *Lepidospora* Escherich, 1905

Subgenus *Lepidospora* Escherich, 1905

21. *Lepidospora* (*Lepidospora*) *ceylonica* Silvestri, 1911

Distribution: Uttarakhand

22. *Lepidospora* (*Lepidospora*) *notabilis* Silvestri, 1913

Distribution: Uttar Pradesh*

Species inquirenda (2 spp.)

Lepisma devadasi Sukumar & Livingstone, 1993

Lepisma indica Escherich, 1903

*Remarks: Mendes (1991) listed the species *Lepidospora* (*Lepidospora*) *notabilis* Silvestri, 1913 occurred from Uttar Pradesh, India. But Silvestri (1913) describe the species based on the collection from Myanmar (E. side of Dawna Hills, L. Burma).

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