

ON A COLLECTION OF ORIBATID FAUNA (ACARI : ORIBATEI) FROM FOREST AND TEA SOILS IN JALPAIGURI DISTRICT, WEST BENGAL, INDIA

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INTRODUCTION

Surveys for oribatid fauna in forest and tea soils were undertaken in Jalpaiguri district, West Bengal, India during 1996. The soil surface of most of the sites in forest and tea estate areas were covered with litter and humus. Examination of a part of the collected specimens from the soil samples reveals twenty six known species distributed over twenty five genera under sixteen families.

All the species except *Brasilobates punctata* listed here and ten genera marked with double asterisk (**) in the list are new records for India.

The specimens are deposited in the laboratory of the Department of Zoology, Ananda Chandra College, Jalpaiguri-735 101, West Bengal, India.

***Hoplophthiracarus foveolatus* Aoki, 1980**

1980. *Hoplophthiracarus foveolatus* Aoki, *Bull. Inst. Envir. Sci. Tech., Yokohama Natn. Univ.*, **6** (2) : 38.

Material examined : 3 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Banarhat Tea Estate (from soil under a tea plant, *Camellia sinensis*), 18. viii. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Birpara Tea Garden (from loose litter of *Camellia sinensis*), 15. viii. 1996 (*B. G. Kundu* coll.).

***Hermannia setiformis* De Wet, 1993**

1993. *Hermannia setiformis* De Wet, *Navors. nas. Mus., Bloemfontein*, **9** (9) : 276.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Lataguri range, Sursuti block (from decomposed leaves of *Alstonia scholaris*), 4. viii. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jainti Tea Estate (from humus), 15. viii. 1996 (*B. K. Mondal* coll.).

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***Microtegeus globifer* Mahunka, 1985**

1985. *Microtegeus globifer* Mahunka, *Acta zool. hung.*, **31** (1-3) : 130.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Atiabari Tea Estate (from decaying leaves of *Camellia sinensis*), 12. v. 1996 (*B. K. Mondal* coll.); 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Moraghat range, North Moraghat block (from rotten leaves of *Dalbergia sissoo*), 20. viii. 1996 (*B. G. Kundu* coll.).

***Liacarus acutidens* Aoki, 1965**

1965. *Liacarus acutidens* Aoki, *Jap. J. Zool.*, **14** (3) : 1.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Lataguri range, Sursuti block (from decomposed leaves of *Ricinus communis*), 4. viii. 1996 (*B. K. Mondal* coll.).

*****Maorizetes ferox* Hammer, 1966**

1966. *Maorizetes ferox* Hammer, *Biol. Skr. Dan. Vid. Selsk.*, **15** (2) : 98.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Kalchini Tea Estate (from soil with rotten leaves of *Camellia sinensis*), 2. vi. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Birpara Tea Garden (from humus), 15. viii. 1996 (*B. G. Kundu* coll.).

*****Pentabodes insolitus* Balogh, 1984**

1984. *Pentabodes insolitus* Balogh, *Acta zool. hung.*, **30** (3-4) : 322.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Cooch Behar Tea Estate (from decomposed leaves of *Camellia sinensis*), 9. iv. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Dalgaon range, Dalgaon block (from loose soil with litter under *Tectona grandis*), 17. viii. 1996 (*B. G. Kundu* coll.).

*****Pseudocarabodes xenus* Mahunka, 1991**

1991. *Pseudocarabodes xenus* Mahunka, *Revue suisse Zool.*, **98** (1) : 199.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Indong Tea Estate (from litter of *Camellia sinensis*), 1. v. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Banarhat Tea Estate (from decaying leaves of *Camellia sinensis*), 18. viii. 1996 (*B. G. Kundu* coll.).

***Pseudotocepheus contractus* Grobler, 1997**

1997. *Pseudotocepheus contractus* Grobler, *Navors. nas. Mus., Bloemfontein*, **13** (1) : 7.

Material examined : 3 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Atiabari Tea Estate (from litter of *Camellia sinensis*), 12. v. 1996 (*B.K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Binaguri Tea Estate (from humus), 16. viii. 1996 (*B. G. Kundu* coll.).

*****Spinotocepheus foveolatus* Hammer, 1981**

1981. *Spinotocepheus foveolatus* Hammer, *Acarologia*, **22** (2) : 229.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Dalgaon range, Dalgaon block (from soil under *Tectona grandis*), 17. viii. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Banarhat range, Rethi block (from soil under *Eucalyptus globulus*), 19. viii. 1996 (*B. G. Kundu* coll.).

***Megalotocepheus undulatus* Hammer, 1981**

1981. *Megalotocepheus undulatus* Hammer, *Acarologia*, **22** (1) : 87.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Patkapara Tea Estate (from rotten leaves of *Camellia sinensis*), 16. vi. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Birpara Tea Garden (from humus), 15. viii. 1996 (*B. G. Kundu* coll.).

*****Plenotocepheus verrucosus* Grobler, 1995**

1995. *Plenotocepheus verrucosus* Grobler, *Navors. nas. Mus., Bloemfontein*, **11** (2) : 16.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Kalchini Tea Estate (from loose soil with humus, litter and rotten leaves of *Camellia sinensis*), 2. vi. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Moraghat range, Moraghat block (from loose humus under *Terminalia arjuna*), 20. viii. 1996 (*B. G. Kundu* coll.).

*****Lophotocepheus simplex* Balogh and Balogh, 1983**

1983. *Lophotocepheus simplex* Balogh and Balogh, *Acta zool. hung.*, **29** (4) : 294.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Birpara Tea Garden (from humus), 23. vi. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal :

Jalpaiguri District, Jainti Tea Estate (from loose soil under *Camellia sinensis*), 15. vii. 1996 (B. K. Mondal coll.).

***Oxyoppia spiculifera* Mahunka, 1985**

1985. *Oxyoppia spiculifera* Mahunka, *Acta zool. hung.*, **31** (4) : 337.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Lataguri range, Sursuti block (from soil with litter under *Acacia auriculiformis*), 4. viii. 1996 (B. K. Mondal coll.); 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Moraghat range, North Moraghat block (from soil under *Swietenia mahogoni*), 20. viii. 1996 (B. G. Kundu coll.).

*****Interoppia mirabilis* Mahunka, 1987**

1987. *Interoppia mirabilis* Mahunka, *Revue suisse Zool.*, **94** (4) : 805.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Raja Tea Estate (from loose litter of *Camellia sinensis*), 29. iv. 1996 (B. K. Mondal coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Banarhat Tea Estate (from soil under a tea plant, *Camellia sinensis*), 18. viii. 1996 (B. G. Kundu coll.).

***Suctobelba insulana* Hammer, 1972**

1972. *Suctobelba insulana* Hammer, *Biol. Skr. Dan. Vid. Selsk.*, **19** (3) : 32.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Dalgaon range, Dalgaon block (from soil under *Melia azedarach*), 17. viii. 1996 (B. K. Mondal coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Banarhat range, Rethi block (from soil under *Tectona grandis*), 19. viii. 1996 (B. G. Kundu coll.).

*****Demisalto engelbrechti* Coetzee, 1993**

1993. *Demisalto engelbrechti* Coetzee, *Navors. nas. Mus., Bloemfontein*, **9** (5) : 143.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Ramsai range, Lower Tundu block (from soil under *Anthocephalus cadamba*), 18. viii. 1996 (B. K. Mondal coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Banarhat range, Rethi block (from decomposed leaves of *Albizia lebbeck*), 19. viii. 1996 (B.G. Kundu coll.).

Zygoribatula gracilata Grobler and Kok, 1993

1993. *Zygoribatula gracilata* Grobler and Kok, *Navors. nas. Mus., Bloemfontein*, 9 (6) : 182.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Binaguri Tea Estate (from compost heap), 28. v. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Banarhat Tea Estate (from decaying leaves of *Camellia sinensis*), 18. viii. 1996 (*B. G. Kundu* coll.).

Xylobates mollicoma Hammer, 1973

1973. *Xylobates mollicoma* Hammer, *Biol. Skr. Dan. Vid. Selsk.*, 20 (3) : 48.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Birpara Tea Garden (from humus), 23. vi. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jainti Tea Estate (from loose soil under *Camellia sinensis*), 15. viii. 1996 (*B. G. Kundu* coll.).

Xylobates triangularis Hammer, 1971

1971. *Xylobates triangularis* Hammer, *Biol. Skr. Dan. Vid. Selsk.*, 16 (6) : 37.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Kalchini Tea Estate (from rotten leaves of *Camellia sinensis*), 2. vi. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Moraghat range, Moraghat block (from loose humus under *Terminalia arjuna*), 20. viii. 1996 (*B. G. Kundu* coll.).

Brasilobates punctata Grobler, 1991

1991. *Brasilobates punctata* Grobler, *Navors. nas. Mus., Bloemfontein*, 7 (5) : 75.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Birpara Tea Garden (from humus), 23. vi. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jainti Tea Estate (from loose soil under *Camellia sinensis*), 15. viii. 1996 (*B. G. Kundu* coll.).

Parahyozetes grandis Hammer, 1967

1967. *Parahyozetes grandis* Hammer, *Biol. Skr. Dan. Vid. Selsk.*, 15 (4) : 11.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Lataguri range, Sursuti block (from soil with litter under *Acacia auriculiformis*), 4. viii. 1996 (*B. K. Mondal* coll.).

*****Trichoribates rausensis* Aoki, 1982**

1982. *Trichoribates rausensis* Aoki, *Bull. Inst. Envir. Sci. Tech., Yokohama Natn. Univ.*, **8** : 190.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Indong Tea Estate (from litter of *Camellia sinensis*), 1. v. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Banarhat Tea Estate (from decaying leaves of *Camellia sinensis*), 18. viii. 1996 (*B. G. Kundu* coll.).

***Galumnella nipponica* Suzuki and Aoki, 1970**

1970. *Galumnella nipponica* Suzuki and Aoki, *Annot. Zool. Japon.*, **43** (3) : 166.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Ramsai range, Lower Tundu block (from soil under *Anthocephalus cadamba*), 18. viii. 1996 (*B. K. Mondal* coll.).

***Galumna parviporosa* Balogh and Balogh, 1983**

1983. *Galumna parviporosa* Balogh and Balogh, *Acta zool. hung.*, **29** (1-3) : 102.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Dalgaon range, Dalgaon block (from soil under *Tectona grandis*), 11. viii. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest div., Banarhat range, Rethi block (from soil under *Eucalyptus globulus*), 19. viii. 1996 (*B. G. Kundu* coll.).

*****Allogalumna remota* Hammer, 1968**

1968. *Allogalumna remota* Hammer, *Biol. Skr. Dan. Vid. Selsk.*, **16** (2) : 66.

Material examined : 2 adult ♀♀, INDIA : W. Bengal : Jalpaiguri District, Binaguri Tea Estate (from compost heap), 28. v. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Lataguri range, Sursuti block (from decomposed leaves of *Ricinus communis*), 4. viii. 1996 (*B. K. Mondal* coll.).

***Pergalumna taprobanica* Balogh, 1988**

1988. *Pergalumna taprobanica* Balogh, *Acta zool. hung.*, **34** (2-3) : 189.

Material examined : 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Gairkhata Tea Estate (from compost heap), 14. vii. 1996 (*B. K. Mondal* coll.); 1 adult ♀, INDIA : W. Bengal : Jalpaiguri District, Jalpaiguri forest Div., Banarhat range, Rethi block (from decomposed leaves of *Albizia lebbeck*), 19. viii. 1996 (*B. G. Kundu* coll.).

SUMMARY

This paper deals with twenty six species of soil oribatid mites (Acari) distributed over twenty five genera under sixteen families. All the species except one (*Brasilobates punctata*) mentioned here are first time reported from India. Ten genera out of twenty five listed here are recorded for the first time from India.

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