

## SOME NEW AND KNOWN *EVIPHIS* FROM INDIA

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### INTRODUCTION

Prior to this study five species of *Eviphis* under the family Eviphididae were known to occur in India. The present paper deals with two new species and new records for three species collected from different States and Union Territories of India.

The type series of the new species are in the repository of the Zoological Survey of India, Calcutta.

Family EVIPHIDIDAE Berlese

***Eviphis sikkimensis* sp. nov.**

(Figs. 1-5)

Female : Dorsal shield 0.456-0.475 mm long, 0.313-0.323 mm wide, sclerotized, with 30 pairs of setae (Fig. 1).

Tritosternum with a pair of pilose laciniae. A pair of pre-sternal shields present. Sternal shield with anterior margin medially convex, posterior margin variable in shape, setae st. I and II simple, st. III spatulate (Fig. 2). Metasternal shield elongate, bearing a seta, not fused with corresponding endopodal shield. Genital shield truncate posteriorly, with a pair of setae. Anal shield almost as broad as long, post-anal seta somewhat spatulate. A pair of long metapodal plates present. Stigma lying between coxae III and IV, peritreme extending little beyond coxa I. Peritrematal shield strip-like and extending posteriorly beyond coxa IV. Interscutal membrane bearing a pair of platelets situated adjacent to genital setae and 10 pairs of setae.

Tectum as in Fig. 3. Fixed and movable digits of chelicera (Fig. 4) bidentate and unidentate respectively.

Coxae II and III bearing a spatulate-like setae.

Male : Dorsal shield 0.415 mm long, 0.275 mm wide, chaetotactic pattern as in female.

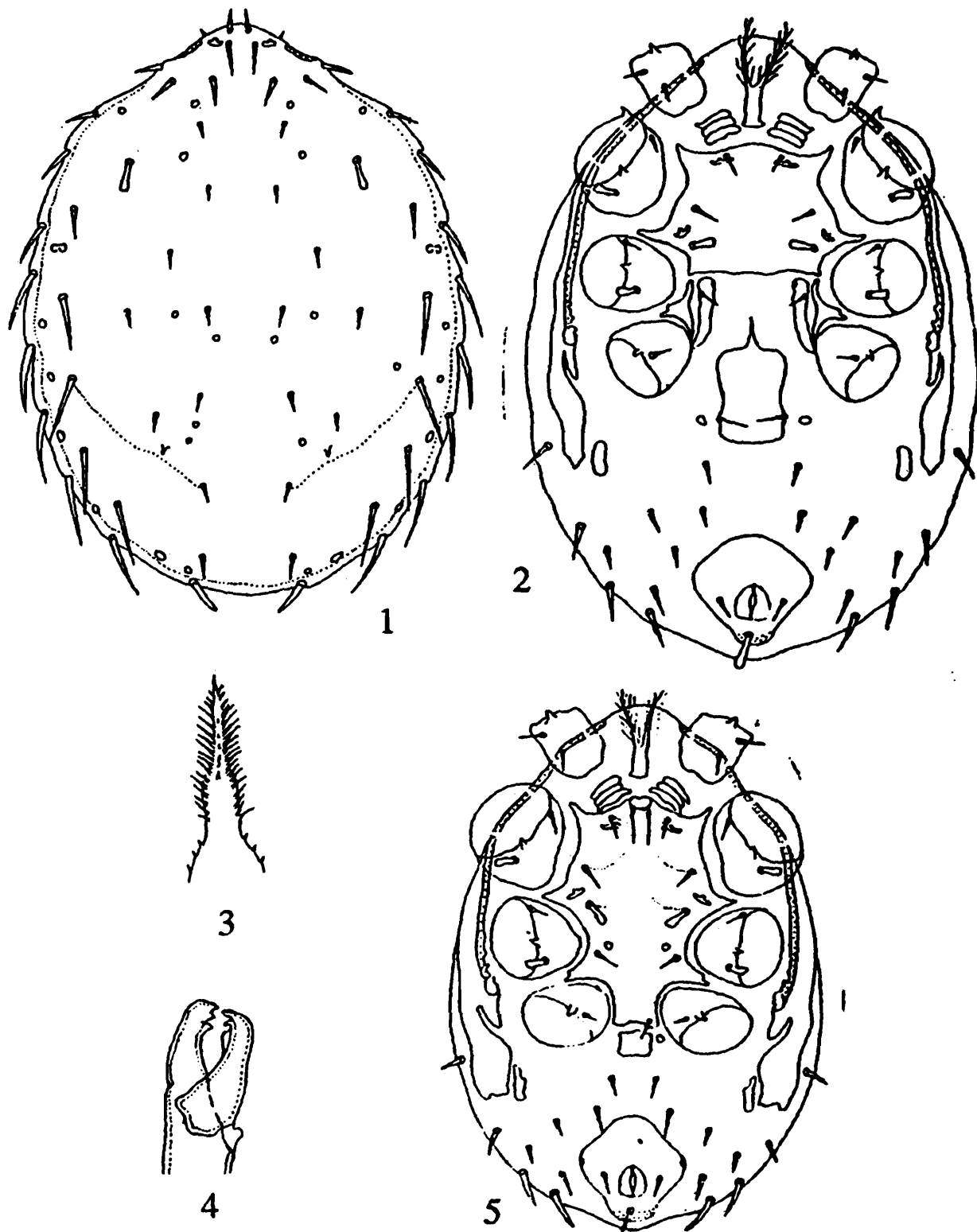
Tritosternum and presternal shield as in female. Sterniti-metasternal-genital shield bearing 9 setae (1 seta missing) of which st. III spatulate-like. A small rectangular shield situated behind sterniti-genital-metasternal shield. Anal shield somewhat longer than broad, postanal seta simple. A pair of metapodal plates

present. Placement of stigma, and peritreme as in female. Peritrematal shield much wider than that of female (Fig. 5). Interscutal membrane with 9 pairs of setae.

Tectum as in female. Chelicera of this unique specimen not examined.

Coxae II and III as in female.

*Material examined* : Holotype ♀ (Reg. No. 3745/17), allotype male (Reg. No. 3746/17). paratype female (Reg. No. 3747/17), from soil, Gangtok, Sikkim, 3.10.83, Dr. G.K. Srivastava.



Figs. 1-5. *Eviphis sikkimensis* sp. nov. 1-4 (Male). 1. Dorsum, 2. Venter, 3. Tectum, 4. Chelicera. 5. (Female) Venter.

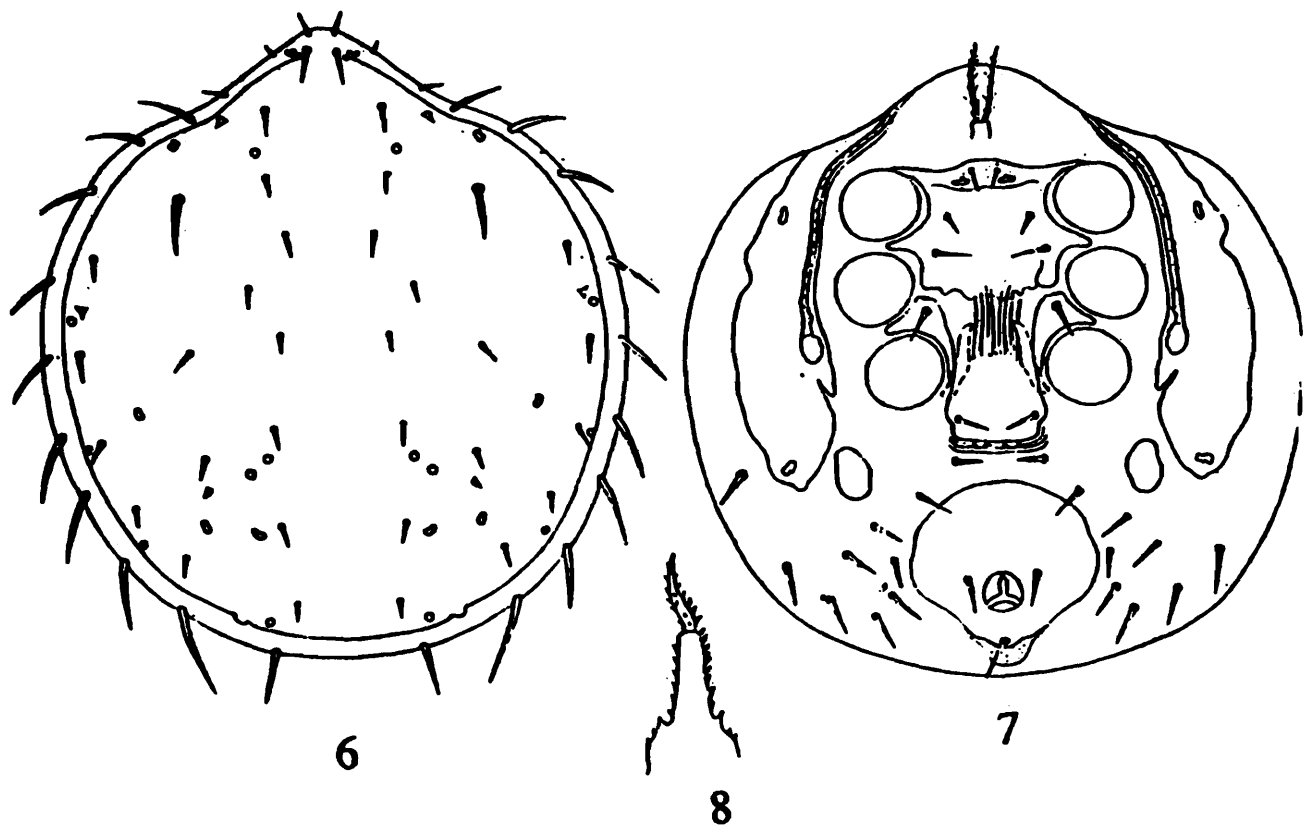
**Remarks :** This species differs from *E. cultratellus* (Berlese, 1910) by the presence of free metasternal shield, the setae st. III being spatulate where as metasternal and genital setae simple.

***Eviphis parindicus* sp. nov.**

(Figs. 6-8)

**Female :** Dorsal shield 0.779 mm long, 0.674 mm wide, sclerotized, with 30 pairs of setae (Fig. 6).

Tritosternum with a pair of laciniae. Presternal shields not discernible. Sternal shield with anterior margin medially convex, posterior margin uneven, bearing 3 pairs of setae; metasternal shield fused with corresponding endopodal and carrying a seta. Epigynial shield truncate posteriorly, bearing a pair of setae. Anal shield as long as broad, with 3 anal setae. Setation of interscutal membrane as distributed in Fig. 7. A pair of large metapodal plates present. Stigma situated between coxae III and IV; peritreme extending beyond coxa I. Peritrematal shield strip-like and extending posteriorly well beyond coxa IV.



**Figs. 6-8. *Eviphis parindicus* sp. nov. Female : 6. Dorsum, 7. Venter, 8. Tectum.**

Tectum as in Fig. 8. Chelicera not examined.

Legs without any spur.

**Male :** Unknown.

**Material examined :** Holotype female, pine leaves litter, around Horticulture Department, East Delphine, Simla District, Himachal Pradesh, 9.11.78, Dr. S.K. Bhattacharyya (Reg. No. 3748/17).

**Remarks :** This species superficially resembles *E. indicus* Bhattacharyya 1971

but differs from it by the broader sternal, peritrematal and anal shields, larger metapodal plate and the shape of tectum.

### **Eviphis convergens** Berlese, 1913

*Material examined* : One female, soil under grass, Batanagar, 24-Parganas, Dist. West Bengal, 30.7.64, Dr. S.K. Bhattacharyya (Reg. No. 2543/17). One female, soil under banana plant, Kovalum Beach, 14 km from Trivandrum, Trivandrum Dist. Kerala, 28. 1.76, Dr. T.D. Soota (Reg. No. 3006/17). One female, soil under grass, Radha Krishna Temple, Govt. Agriculture Farm, Camorta, Nancowry, Nicobar Dist., Andaman & Nicobar Islands, 18.1.75, Dr. S.K. Bhattacharyya (Reg. No. 3005/17).

*Remarks* : This species is first time recorded for Kerala State, Andaman & Nicobar Islands.

### **Eviphis cultratellus** (Berlese, 1910)

*Material examined* : Three females, soil, Jeetlongbasti, Rangpo, Sikkim, 30.8.78, Dr. A.C. Mishra (Reg. No. 3402/17). Four females, four males, decaying dung, Bangbasti, Kalimpong, Darjeeling Dist., 24.8.78 Dr. A.C. Mishra (Reg. No. 3143/17). One female, cow dung, Loharband, Cachar Dist., Assam, 10.12.69, Dr. S.K. Bhattacharyya (Reg. No. 3035/17). Three females, one male, soil and moss litter, Edemon, Umpling, Nongthymmai, Shillong, United Khasi & Jaintia Hills Dist., Meghalaya, 1.12.69, Dr. S.K. Bhattacharyya (Reg. No. 3036/17). One female, cow dung, Edemon, Umpling, Nongthymmai, Shillong, United Khasi & Jaintia Hills District, Meghalaya, 1.12.69, Dr. S.K. Bhattacharyya (Reg. No. 3747/17). One male, cow dung, Gourangatalla. Teli Mora, Tripura, 15.12.69, Dr. S.K. Bhattacharyya (Reg. No. 3750/17). One female, pine leaf litter, Chitradurga, Chitradurga Dist., Karnataka, 18.12.80. Dr. S.K. Gupta (Reg. No. 3415/17). One female, associated with beetles, Madhumalai Wild Life Sanctuary, Nilgiri Dist., Tamil Nadu, 12.2.82, Dr. S.K. Bhattacharyya (Reg. No. 3751/17).

*Remarks* : This species is recorded for the first time from Sikkim, Assam Meghalaya, Tripura, Karnataka, Tamil Nadu.

### **Eviphis indicus** Bhattacharyya, 1971

*Material examined* : One female, cow dung, Katrain, Kulu Dist., Himachal Pradesh, 21.11.78, Dr. S.K. Bhattacharyya (Reg. No. 3752/17). One male, pine leaf litter, St. Mary and St. Nicholas Church, Nainital, U.P., 10.4.71, Dr. S.K. Bhattacharyya (Reg. No. 2943/17). One female, pine leaf litter, Kilcut, Ranikhet, Almora Dist., U.P., 18.4.71, Dr. S.K. Bhattacharyya (Reg. No. 2944/17). One female, cow dung, Lohar Band, Cachar Dist., Assam, 10.12.69, Dr. S.K. Bhattacharyya (Reg. No. 2941/17). Two females, cow dung, Madhurban, Silchar, Cachar Dist., Assam, 7.12.69, Dr. S.K. Bhattacharyya (Reg. No. 2946/17). One female, mule dung, Sonai Rupai Forest, Wild Life Sanctuary, Charduar Reserve Forest, Missamari, Assam, 2.12.65, Dr. S.K. Bhattacharyya (Reg. No. 2942/17). Three females, and four

males. cow dung, Moera Tetli, Tezpur Darang Dist., Assam, 31.12.65, Dr. S.K. Bhattacharyya (Reg. No. 2945/17). One female, mango leaf litter, Banamali, Karimganj, Assam, 9.12.69, Dr. S.K. Bhattacharyya (Reg. No. 1947/17). One female, one male, cow dung, Gourangatalla, Teliamera, Tripura, 15.12.69, Dr. S.K. Bhattacharyya (Reg. No. 2949/17). Three females, two males, soil litter, Brindaban Garden, Karnataka, 1971, M.M. Paramanik (Reg. No. 2948/17). One female, soil under grass, Kalayani, Nadia Dist., W. Bengal, 20.9.68, Dr. S.K. Bhattacharyya (Reg. No. 2940/17). One female, leaf litter, near Aruvankadu Rail Station, Nilgiri Dist., Tamil Nadu, 8.2.82, Dr. S.K. Bhattacharyya (Reg. No. 3753/17). One female, soil litter, Madhumalai Wild Life Sanctuary, Nilgiri Dist., Tamil Nadu, 12.2.82, Dr. S.K. Bhattacharyya (Reg. No. 3754/17).

*Remarks* : This species is reported for the first time from Himachal Pradesh, Uttar Pradesh, Assam, Tripura, Karnataka, Tamil Nadu.

### SUMMARY

Two new species of *Eviphis sikkimensis* and *E. parindicus* from Sikkim and Himachal Pradesh are described respectively and new records for three species are reported.

### ACKNOWLEDGEMENT

I wish to thank Professor M.S. Jairajpuri, Director, Zoological Survey of India for the facilities.

### REFERENCES

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