

INSECTA : COLEOPTERA : CHRYSOMELIDAE

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INTRODUCTION

(With 10 Figures)

This report is based on the collection of Chrysomelidae (Subfamilies Criocerinae, Cryptocéphalinae, Eumolpinae, Galerucinae, Chrysomelinae, Alticinae, Hispinae and Cassidinae) from Namdhapa in Tirap District of Arunachal Pradesh by S. Biswas & party.

This collection comprises 56 species under 35 genera of which 2 species are new to science and are described below. 3 species viz. *Atysa gigantea* Maulik was earlier known from Burma, *Lema westwoodi* Jacoby from Sri Lanka and *Psylliodes balyi* Jacoby from China, Sumtra etc., are now being recorded from India for the first time. Besides, 37 species are new records from Arunachal Pradesh which are marked with asterisks. The specimens dealt with in this paper are deposited in the Zoological Survey of India, Calcutta.

SYSTEMATIC ACCOUNT

Order COLEOPTERA

Family CHRYSOMELIDAE

Subfamily CRIOCERINAE

*1. *Lema castanea* Jacoby

1908. *Lema castanea* Jacoby, *Fauna Brit. India, Coleoptera, Chrysomelidae*, 1 : 37.

Material examined : 1 ex., Horn Bill, 14.iv. 1981.

Distribution : India : Assam, Arunachal Pradesh.

2. *Lema* sp. (nr. *castanea* Jacoby)

Material examined : 1 ex., Zero Camp, 9.iv.1981.

Remarks : The specific identity could not ascertained due to the non-availability of the required literatures.

3. **Lema sp. (nr. assamensis Jacoby)**

Material examined : 1 ex., Hornbill, 11.iv.1981.

Remarks : This is probably a new species but it could not be confirmed due to the non availability of the required literatures.

*4. **Lema femorata Guerin**

1844. *Lema femorata* Guerin, *Icon. Regne Anim., Ins.* : 259.

1908. *Lema femorata* : Jacoby : 56

Material examined : 1 ex., Deban, 6.iv.1981.

Distribution : India : Assam, Arunachal Pradesh.

*5. **Lema westwoodi Jacoby**

1899. *Lema westwoodi* Jacoby. *The Entomologist*, 32 : 68.

1908. *Lema westwoodi* : Jacoby : 64-65

Material examined : 2 exs., Zero Camp, 9.iv. 1981.

Distribution : India : Arunachal Pradesh.

Remarks : This species is being recorded here for the first time from India.

*6. **Lema nigricollis Jacoby**

1891. *Lema nigricollis* Jacoby, *The Entomologist*, Suppl. : 31

1908. *Lema nigricollis* : Jacoby : 69-70.

Material examined : 1 ex., Firm base, 17.iv.1981.

Distribution : India : Assam and Arunachal Pradesh.

Subfamily CRYPTOCEPHALINAE

*7. **Cryptocephalus exsulans Suffrian**

1854. *Cryptocephalus exsulans* Suffrian, *Linn. Ent. Monogr.*, 9 : 149.

1908. *Cryptocephalus exsulans* : Jacoby : 195-196.

Material examined : 1 ex., Deban, 6.iv.1981.

Distribution : Meghalaya and Arunachal Pradesh.

Subfamily EUMOLPINAE

*8. **Nodina indica Jacoby**

1895. *Nodina indica* Jacoby, *Ann. Soc. Ent. Belg.*, 39 : 271.

1908. *Nodina indica* : Jacoby : 292.

Material examined : 3 exs., Firm base, 17.iv.1981.

Distribution : India : Maharashtra and Arunachal Pradesh.

Remarks : This species was, so far, recorded from Maharashtra and now it is being recorded here for the first time from North Eastern India (Arunachal Pradesh).

***9. Basilepta viridipenne (Motschulsky)**

1860. *Nodostoma viridipenne* Motschulsky, in Schrenck, *Reise Amur.*, : 177.

1967. *Basilepta viridipenne* : Kimoto, *Esakia* (6) : 69.

Material examined : 12 exs., Firm base, 17-20.iv.1981.

Distribution : India : Arunachal Pradesh and Himachal Pradesh.

Remarks. Jacoby (1908) mentioned that Motschulsky's material was labeled as "Hab. India".

***10. Basilepta hirsutum Jacoby New combination**

1908. *Nodostoma hirsutum* Jacoby : 343.

Material examined : 2 exs., Firm base, 19.iv.1981.

Distribution : India : Assam and Arunachal Pradesh.

11. Basilepta sp. :

Material examined : 1 ex., Gibbon land, 8.v.1981.

12. Colasposoma sp. (nr. auripenne Motschulsky)

Material examined : 1 ex., Gibbon land, 8.v.1981.

Subfamily GALERUCINAE

***13. Oides pectoralis (Clark)**

1865. *Rhombpalpa pectoralis* Clark, *Ann. Mag. Nat. Hist.*, (3) 15 : 144.

1936. *Oides pectoralis* : Maulik : 114-116.

Material examined. 1 ex., Firm base. 19.iv.1981.

Distribution : India : Sikkim, West Bengal, Meghalaya, Arunachal Pradesh and Manipur.

***14. Merista fraternalis (Baly)**

1879. *Leptarthra fraternalis* Baly, *Cist. Ent.*, 2 : 455.

1936. *Merista fraternalis* : Maulik : 146-147.

Material examined : 1 ex., Hornbill, 10.iv.1981.

Distribution : India : Meghalaya, Arunachal Pradesh and Manipur.

***15. *Aulacophora almora* Maulik**

1936. *Aulacophora almora* Maulik : 170-171.

Material examined : 1 ex., Horn bill, 15.iv.1981.

Distribution : India : Meghalaya, Assam, Arunachal Pradesh, West Bengal and Uttar Pradesh.

***16. *Aulacophora bicolor* (Weber)**

1801. *Galleruca bicolor* Weber, *Obs. Ent.*, : 56.

1936. *Aulacophora bicolor* : Maulik : 187-189.

Material examined : 1 ex., Deban, 7.iv.1981.

Distribution : India : Meghalaya, Arunachal Pradesh and West Bengal.

***17. *Atysa gigantea* Maulik**

1936. *Atysa gigantea* Maulik : 248-249.

Material examined : 1 ex., Zero Camp, 8.iv.1981.

Distribution : India : Arunachal Pradesh.

Remarks : This species was recorded earlier from Burma and now it is being recorded for the first time from India.

***18. *Miltina dilatata* Chapuis**

1875. *Miltina dilatata* Chapuis, *Gen. col.*, 11 : 173.

1936. *Miltina dilatata* : Maulik : 316.

Material examined : 2 exs., Gibbon land, 30.iv.1981 ; 1 ex., Gibbon land, 2.v.1981.

Distribution : India : Assam, Manipur, Arunachal Pradesh and Sikkim.

19. *Cneorinae* sp. (nr. *fulvicornis* Jacoby)

Material examined : 1 ex., Horn bill, 16.iv.1981.

***20. *Dercetina flavocincta* (Hope)**

1831. *Galleruca flavocincta* Hope, in Gray, *Zool. Miscell.*, : 29.

1967. *Dercetina flavocincta* : Kimoto, *Esakia* (6) : 70.

Material examined : 2 exs., Deban, 7.iv.1981.

Distribution : India : West Bengal, Assam, Arunachal Pradesh, Sikkim and Himachal Pradesh.

***21. *Dercetina shona* (Maulik)**

1936. *Dercetis shona* Maulik : 361-362.

1967. *Dercetina shona* : Kimoto, *Esakia* (6) 71.

Material examined : 2 exs., Horn bill, 15.iv.1981.

Distribution : India : West Bengal, Sikkim, Assam, Arunachal Pradesh and Himachal Pradesh.

***22. *Dercetina subcaerulea* (Jacoby) New combination**

1891. *Antipha subcaerulca* Jacoby, *Entomologist* (Suppl.) 24 : 33.

1936. *Dercetis subcaerulea* : Maulik : 364-365.

Material examined : 2 exs., Gibbonland, 30.iv.1981.

Distribution : India : Assam, Meghalaya, Arunachal Pradesh and Manipur.

***23. *Monolepta signata* (Olivier)**

1808. *Galeruca signata* Olivier, *Entomologist*, : 6 : 665.

1963. *Monolepta signata* : Gressitt & Kimoto : 633-634.

Material examined : 1 ex., Deban, 7.iv.1981.

Distribution : India : Assam and Arunachal Pradesh.

24. *Monolepta* sp.

Material examined : 3 exs., Horn bill, 11.iv.1981.

25. *Mandarella nagpurensis* Duvivier

1892. *Mandarella nagpurensis* Duvivier, *Anr. Soc. Ent. Belg.*, 36 : 434.

1936. *Mandarella nagpurensis* : Maulik : 459.

Material examined : 1 ex., Horn bill, 12.iv.1981.

Distribution : India : Bihar and Arunachal Pradesh.

26. *Hoplasomedia* sp. (nr. *sarata* Maulik)

Material examined : 1 ex., Deban, 7.iv.1981.

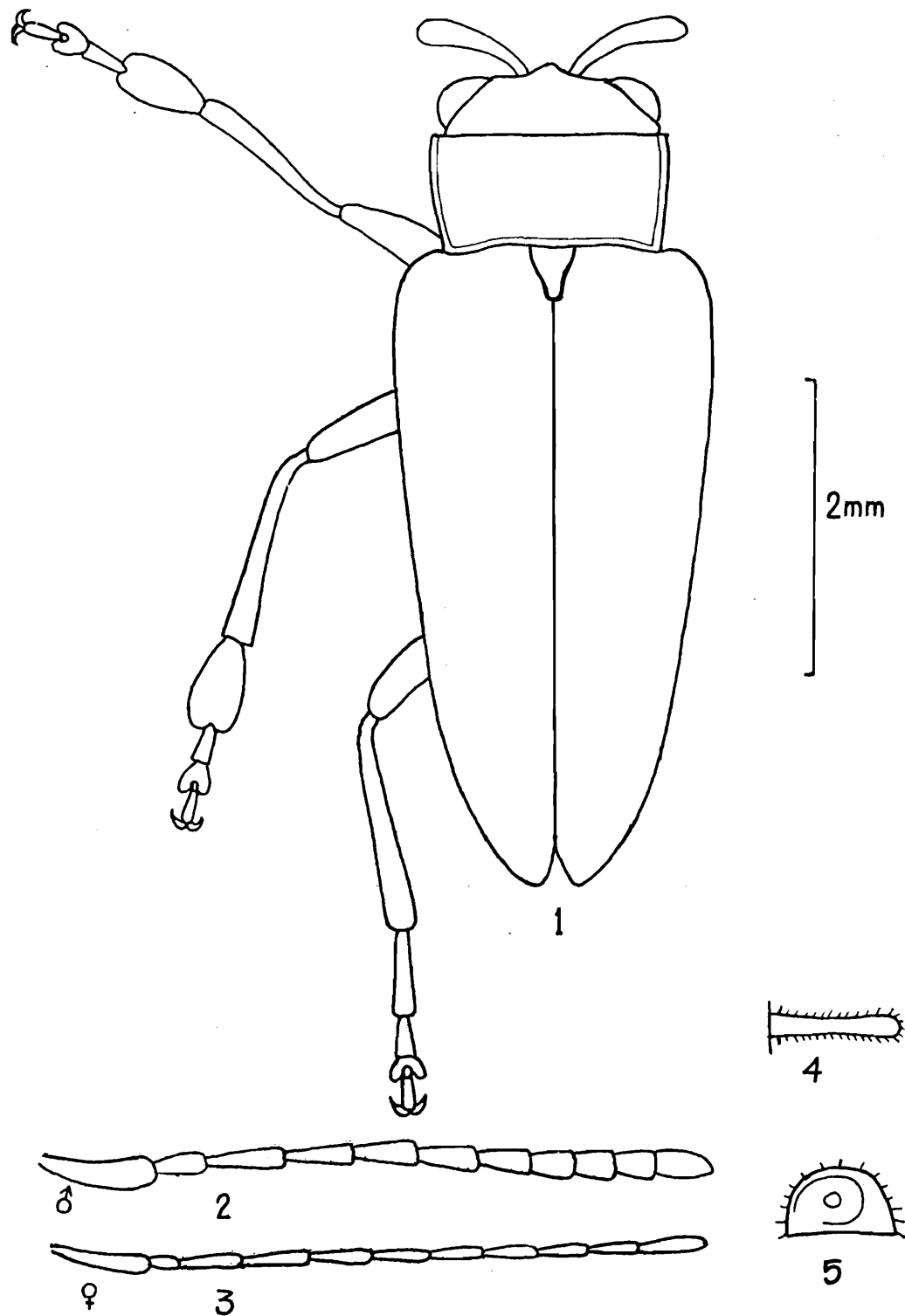
Remarks : The specific identity could not be ascertained as the specimen was not in a good condition.

27. *Hoplasomedia arunachalensis* sp. nov.

(Fig. 1-5)

Entirely yellowish brown, head and pronotum shining, elytra dull.

Head with vertex smooth and impunctate, clypeal carina sharp ; antennae reaching beyond the middle of elytra ; in ♀ (Fig. 3) filiform, segment 1 long and club shaped, segment 2 small and rounded, segments 3-10 gradually shorter, segment 11 longer ; in ♂ (Fig. 2) apical



Figs. 1-5. *Hoplasomedia arunachalensis* sp. nov., 1. Dorsal view, 2. Antennae of ♂, 3. Antennae of ♀. 4. Abdominal Process, 5. Cross sectional view of antennal segment.

segments modified and thickened, segment 1 long and club shaped, segment 2 small, segment 3 much longer than segment 2, segments 3-7 subequal, segments 8-11 shorter and thicker, under side of segments 6-11 flat (as if longitudinally cut off along the middle, a cross sectional diagram (Fig. 5) of epical end of segment 9 is given). *Prothorax* twice as broad as long, broadened anteriorly, anterior margin nearly straight, posterior margin slightly sinuate, lateral margins nearly straight, surface indistinctly punctate at sides with a broad transverse depression along middle. *Scutellum* triangular with the apex rounded and its surface smooth and impunctate. *Elytra* narrowed apically, basal area behind scutellum slightly convex, whole surface finely and confusedly punctate. Tarsal segment 1 of anterior two pairs of legs dilated in male and its abdomen with a single process (Fig. 4).

Measurements of holotype : Total length 6.00 mm, width of head across eyes 1.50 mm, length of antennae 4.70 mm, width of prothorax across middle 1.60 mm, length of elytra 5.00 mm and width of elytra across middle 2.20 mm.

Holotype ♂ and *paratype* ♀, INDIA : Arunachal Pradesh : Namdapa, Hornbill, 14.iv.1981, S. Biswas.

Remarks : This species is near *H. rasha* Maulik but can be easily separated by the following characters : Entirely yellowish brown ; under side of segments 6-11 in male flat as if longitudinally cut off along the middle ; prothorax twice as broad as long, surface minutely punctate at sides ; first tarsal segment of anterior two pairs of legs in male strongly dilated.

28. *Minastra* sp. (nr. *arcuata* Baly)

Material examined : 1 ex., Firmbase, 18.iv.1981.

Remarks : The specimen was damaged.

*29. *Sphenoraia* (*Sphenoraioides*) *rutilans* (Hope)

1831. *Eumolpus rutilans* Hope, in Gray, *Zool. Miscell.*, : 30

1963. *Sphenoraia* (*Sphenoraioides*) *rutilans* : Gressitt & Kimoto, *Pac. Ins. Monogr.*, 1 B : 657.

Material examined : 1 ex, Hornbill, 14.iv.1981.

Distribution : India : West Bengal, Bihar, Assam, Meghalaya, Arunachal Pradesh, Sikkim, Uttar Pradesh, Himachal Pradesh and Kashmir.

30. Aplosonyx chalybaeus (Hope)

1831. *Galleruca chalybaeus* Hope, in Gray, *Zool. Miscell.*, : 28.
 1963. *Aplosonyx chalybaeus* : Gressitt & Kimoto : 653-654.

Material examined : 12 exs., Gibbon land, 2.v.1981 ; 13 exs., Deban 2.iv.1981.

Distribution : India : Sikkim, Assam and Arunachal Pradesh.

***31. Aplosonyx scutellatus Baly**

1879. *Haplosonyx scutellatus* Baly, *Cist. Ent.*, 2 : 452.
 1936. *Aplosonyx scutellatus* : Maulik : 616

Material examined : 5 exs., Hornbill, 14.iv.1981.

Distribution : India : Assam and Arunachal Pradesh.

***32. Gallerucida limbata (Baly)**

1878. *Eustetha limbata* Baly, *Cist. Ent.*, 2 : 462
 1936. *Gallerucida limbata* : Maulik : 550.

Material examined : 1 ex., Gibbon land, 2.v.1981.

Distribution : India : Assam and Arunachal Pradesh.

Subfamily CHRYSOMELINAE

***33. Agrosteomela indica indica (Hope)**

1831. *Chrysomela indica* Hope, in Gray, *Zool. Misc.*, : 29.
 1963. *Agrosteomela indica indica* : Gressitt & Kimoto : 331

Material examined : 1 ex., Namdhapa Camp, 21.iv.1981.

Distribution : India : West Bengal, Arunachal Pradesh, Nagaland, Manipur, Sikkim and Uttar Pradesh.

***34. Humba cyanicollis (Hope)**

1831. *Chrysomela cyanicollis* Hope, in Gray, *Zool. Misc.*, : 29
 1963. *Humba cyanicollis* : Gressitt & Kimoto : 333

Material examined : 5 exs., Namdhapa Camp, 23.iv.1981.

Distribution : India : Sikkim, West Bengal, Assam, Arunachal Pradesh and Manipur.

Subfamily ALTICINAE

***35. Psylliodes balyi Jacoby**

1884. *Psylliodes balyi* Jacoby, *Notes Lyden Mus.*, 6 : 30
 1969. *Psylliodes balyi* : Scherer : 237

Material examined : 19 exs., Miao, 5.iv.1981.

Distribution : India : Arunachal Pradesh.

Remarks : This species is recorded here for the first time from India.

36. *Hespera* sp.

Material examined : 1 ex., Namdhapa Camp, 23.iv.1981.

Remarks : The specimen was damaged.

37. *Hespera biswasi* sp. nov.

(Fig. 6-10)

Oblong, entirely dark brown to blackish with yellowish brown pubescence.

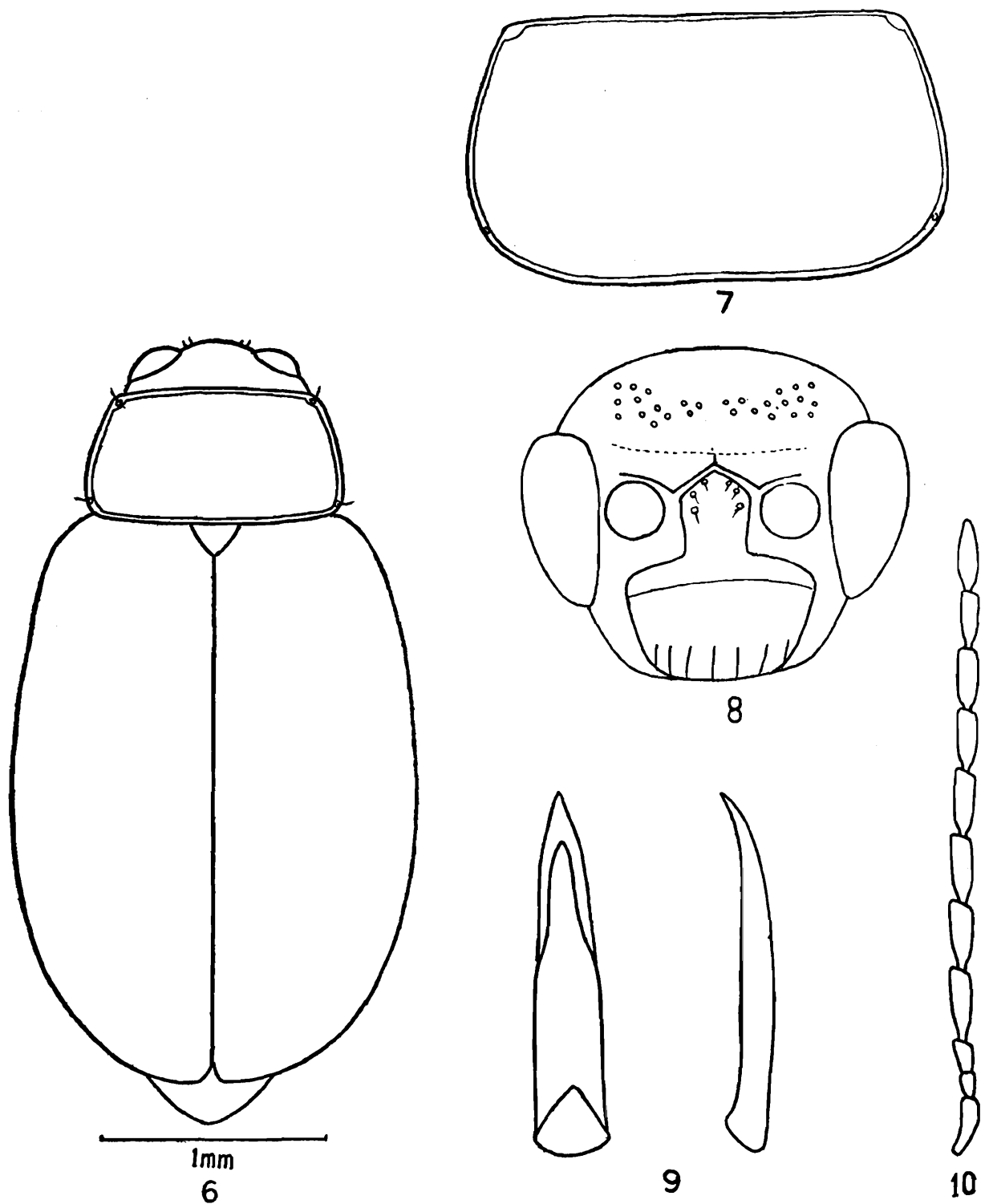
Head (Fig. 8) convex with surface finely granulate and with scattered strong punctures, not covered with pubescence, clypeal longitudinal carina strongly raised, antennal calli prominent and transverse. Antennae (Fig. 10) extending beyond the middle of elytra, segment 1 long and club-shaped, segment 2 small and rounded, segment 3 slightly longer than segment 2, segments 4-11 subequal and each of them longer than segments 2 and 3 combined and also thicker. *Prothorax* (Fig. 7) about one and half times broader than long, slightly narrowed anteriorly, sides almost straight, posterior angles widely rounded, surface granulose-punctate and covered with pubescence. *Scutellum* triangular and granulate. *Elytra* almost parallel sided, granulose punctate and covered with pubescence. *Aedeagus* as figured (Fig. 9).

Measurements of Holotype : Total length 3.30 mm, width of head across eyes 0.75 mm, length of antennae 2.50 mm, width of prothorax across middle 0.90 mm, length of elytra 2.40 mm and width of elytra across middle 1.90 mm.

Paratypes range from 2.75 mm to 4.0 mm in length.

Holotype ♂ and *Paratypes* 5 ♀ ♀ ♂ ♂, India ; Arunachal Pradesh : Tirap Div., Namdhapa, Miao, 5.iv.1981, S. Biswas

Remarks : This species is near *H. kumaonensis* Scherer but can be easily separated by the following characters : Entirely dark brown ; head without pubescence and with scattered strong punctures, antennal calli moderately broad, antennal segments 4-11 subequal and each of them longer than segments 2 and 3 combined ; elytral granulated surface having equal rugosity with that of pronotum ; size larger (upto 4.0 mm).



Figs. 6-10. *Hespera biswasi* sp. nov., 6. Dorsal view, 7. Prothorax, 8. Front view of head, 9. Ventral and lateral views of aedeagus, 10. Antennae.

*38. *Eudolia nila* Maulik

1926. *Eudolia nila* Maulik : 200-201

1969. *Eudolia nila* : Scherer : 95

Material examined : 2 exs., Namdhapa Camp, 23.iv.1981.

Distribution : India : Assam, Arunachal Pradesh and Manipur.

***39. Hyphasis indica Baly**

1879. *Hyphasis indica* Baly, *Cist. Ent.*, 2 : 442

1969. *Hyphasis indica* : Scherer : 180

Material examined : 3 exs., Deban North, 28.iv.1981.

Distribution : India : West Bengal, Sikkim, Assam, Arunachal Pradesh and Manipur.

40. Clitea sp. (nr. metallica Chen)

Material examined : 1 ex., Zero Camp, 8.iv.1981.

41. Nisotra sp. (nr. viridipennis Mots.)

Material Examined : 1 ex., Firmbase, 21.iv.1981.

42. Sphaeroderma sp.

Material examined : 1 ex., Firmbase, 19.iv.1981 ; 17 exs., Namdhapa Camp, 21-24.iv.1981 ; 6 exs., Hornbill, 16.iv.1981.

Remarks : The above material contain four species and will be included in the Author's next work the Indian species of *Sphaeroderma* which is in progress.

***43. Hemipyxis lusca (Fabricius)**

1801. *Crioceris lusca* Fabricius, *Syst. Eleuth.*, 1 : 456.

1963. *Hemipyxis lusca* : Gressitt & Kimoto : 843

Material examined : 1 ex., Miao, 2.iv.1981.

Distribution : India : Assam and Arunachal Pradesh.

***44. Hemipyxis brevicollis Jacoby New Combination**

1903. *Sebaethe brevicollis* Jacoby, *Ann. Soc. Ent. Belg.*, 47 : 106.

Material examined : 1 ex., Hornbill, 14.iv.1981.

Distribution : India : Tamil Nadu and Arunachal Pradesh.

Remarks : This species was recorded, so far, from Southern India and now it is being recorded for the first time from North Eastern India.

45. Hemipyxis sp. (nr. brevicollis Jacoby)

Material examined : 1 ex., Gibbon land, 30.iv.1981.

Remarks : The specific identity could not be confirmed due to the bad condition of the specimen.

46. **Hemipyxis** sp. (nr. *ioscopa* Maulik)

Material examined : 1 ex., Hornbill, 16.iv.1981.

Remarks : The species may be a new one but could not be established at the present moment.

Subfamily HISPINAE

*47. **Dactylispa doriae** (Gestro)

1890. *Hispa doriae* Gestro, *Ann. Mns. Civ. Genova*, 30 : 256.

1919. *Dactylispa doriae* : Maulik : 172-173.

Material examined : 1 ex., Hornbill, 16.iv.1981.

Distribution : India : Sikkim, West Bengal, Assam and Arunachal Pradesh.

*48. **Dactylispa bindusara** Maulik

1919. *Dactylispa bindusara* Maulik : 193-194

1981. *Dactylispa bindusara* : Kimoto and Takizawa, *Ent. Rev. Japan*, 35 (1/2) : 65.

Material examined : 2 exs., Namdhapa Camp, 23.iv.1981.

Distribution : India : Uttar Pradesh, Sikkim, West Bengal, Meghalaya and Arunachal Pradesh.

49. **Dactylispa** sp.

Material examined : 1 ex., Firmbase, 20.iv.1981.

Remarks : The specimen was damaged.

Subfamily CASSIDINAE

*50. **Epistictina viridimaculata** Boheman

1850. *Epistictina viridimaculata* Boheman, *Mon. Cassid.*, 1 : 15.

1972. *Epistictina viridimaculata* : Vazirani : 150.

Material examined : 1 ex., Hornbill, 15.iv.1981.

Distribution : India : Sikkim, West Bengal, Assam, Arunachal Pradesh and Manipur.

51. *Aspidomorpha sanctaecrucis* (Fabricius)**1792. *Cassida sanctaecrucis* Fabricius, *Ent. Syst.*, 4 : 446.1963. *Aspidomorpha sanctaecrucis* : Gressitt & Kimoto : 953-954.*Material examined* : 1 ex., Miao, 1.iv.1981.*Distribution* : India : Sikkim, West Bengal, Assam, Meghalaya, Arunachal Pradesh, Karnataka, Kerala and Tamil Nadu.52. *Aspidomorpha chandrika* Maulik**1919. *Aspidomorpha chandrika* Maulik : 331-3321963. *Aspidomorpha chandrika* : Gressitt & Kimoto : 949*Material examined* : 1 ex., Gibbonland, 2.v.1981.*Distribution* : India : West Bengal and Arunachal Pradesh.***53. *Aspidomorpha furcata* (Thunberg)**1789. *Cassida furcata* Thunberg, *Nov. Ins. Spec.*, 5 : 87.1963. *Aspidomorpha furcata* : Gressitt & Kimoto : 950-952*Material examined* : 1 ex., Deban, 6.iv.1981.*Distribution* : India : Sikkim, West Bengal, Assam, Arunachal Pradesh, Orissa, Karnataka and Kerala.***54. *Lacoptera quadrimaculata* (Thunberg)**1789. *Cassida quadrimaculata* Thunberg, *Nov. Ins. Spec.*, 5 : 86.1972. *Lacoptera quadrimaculata* : Vezirani : 150*Material examined* : 3 exs., Deban North, 28.iv.1981.*Distribution* : India : Sikkim, Assam, Arunachal Pradesh, Meghalaya, West Bengal, Uttar Pradesh, Karnataka, Kerala and Andaman Island.**55. *Cassida occursans* Spaeth**1914. *Cassida occursans* Spaeth, *Deut. Ent. Zeits.*, : 560.1972. *Cassida occursans* : Vazirani : 148-149.*Material examined* : 2 exs., Hornbill, 14.iv.1981.*Distribution* : India : West Bengal, Assam and Arunachal Pradesh.***56. *Cassida catenata* (Boheman)**1855. *Coptocycla catenata* Boheman, *Mon. Cassid.*, 3 : 262.1919. *Cassida catenata* : Maulik : 406*Material examined* : 1 ex., Namdhapa Camp, 22.iv.1981.*Distribution* : India : West Bengal, Arunachal Pradesh and Uttar Pradesh.

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SUMMARY

Fifty-six species belonging to thirty-four genera distributed in eight subfamilies are reported in this paper. Two species namely *Hoplasmia arunachalensis* and *Hespera biswasi* are new to science. Three species are new records from India, thirty-seven species are new records from the state (Arunachal Pradesh). Of the species dealt with in this paper, twenty-five species are endemic to North East India, three species are extended to Southern India and thirty-two species limited to Himalayan region.

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