

## CHRYSOMELIDAE (COLEOPTERA) OF SILENT VALLEY, KERALA

By

C. R. BASU

*Zoological Survey of India, Calcutta*

### INTRODUCTION

During April 1979 to May 1980 Zoological Survey of India conducted four surveys in Silent Valley of Kerala State. The present study based on a collection comprising of 125 examples belonging to 40 species under 25 genera of the family Chrysomelidae. This is a very large and economically important family of the order Coleoptera and has been extensively dealt by Maulik (1919, 1926, 1936) and also by Jacoby (1908) and Scherer (1969). Chrysomelidae recorded so far from Southern India has been known mostly from Tamil Nadu (=Madras State) which includes Nilgiri Hills. Practically, very little or nothing is available in the published record on Chrysomelidae of Kerala State including Silent Valley. Therefore, all the species dealt in this paper are new record to Silent Valley as well as to the Kerala State, and also some of them have been recorded here for the first time from Southern India. Out of 40 species dealt in this paper, 21 species are only known from Southern India, 8 species extended to North East India, 1 species to Anadman and 8 species distributed almost to all over India.

### LIST OF THE SPECIES OF CHRYSOMELIDAE OF SILENT VALLEY

#### Subfamily CRIOCERINAE

1. *Lema* sp.

#### Subfamily CRYPTOCEPHALINAE

2. *Cryptocephalus lefevrei* Jacoby
3. *Cryptocephalus* sp.

#### Subfamily EUMOLPINAE

4. *Basilepta fulvicorne* (Jacoby)
5. *Basilepta* sp. 1

6. *Basilepta* sp. 2
7. *Colasposoma robustum* Jacoby
8. *Trilinea picea* Jacoby

Subfamily GALERUCINAE

9. *Hoplasoma nilgiriensis* Jacoby
10. *Hoplasoma unicolor* (Illiger)
11. *Hoplasoma dilaticornis* Jacoby
12. *Aulacophora nilgiriensis* Jacoby
13. *Aulacophora lewisi* Baly
14. *Aulacophora cincta* (Fabricius)
15. *Aulacophora cruenta* (Fabricius)
16. *Mimastracella hirsuta* Jacoby
17. *Dercetina* sp.
18. *Monolepta signata* (Olivier)

Subfamily CHRYSOMELINAE

19. *Plagioderia divisa* Jacoby

Subfamily ALTICINAE

20. *Nonarthra birmanica* (Jacoby)
21. *Psylliodes viridana* Motschulsky
22. *Huphasis intermedia* Jacoby
23. *Euphitrea indica* Jacoby
24. *Chlaenosoma metallica* Jacoby
25. *Chaetocnema* (*Chaetocnema*) *pusaensis* Maulik
26. *Chaetocnema* (*Chaetocnema*) *bretinghami* Baly
27. *Chaetocnema* (*Tlanoma*) *basalis* (Baly)
28. *Elytropachys* ? *sandalensis* Bryant
29. *Nisotra madurensis* Jacoby
30. *Nisotra apicefulva* (Bryant)
31. *Longitarsus belgaumensis* Jacoby
32. *Luperomorpha vittata* Duvivier
33. *Sebaethe pallidicincta* Jacoby
34. *Sebaethe nigratarsis* Jacoby
35. *Phygasia silacea* (Illiger)
36. *Schenklingia keralaensis* Basu & Sengupta

Subfamily HISPINAE

37. *Hispa andrewesi* (Weise)
38. *Dactylispa krishna* Maulik
39. *Dactylispa spinipes* Weise
40. *Dactylispa pitapada* Maulik

SYSTEMATIC ACCOUNT

Order COLEOPTERA

Family CHRYSOMELIDAE

Subfamily CRIOCERINAE

1. *Lema* sp.

*Material* : 1 ex., Kerala, Silent Valley, 2. iv. 1980, R. S. Pillai.

*Remarks* : As the specimen was badly damaged, further identification was not possible.

Subfamily CRYPTOCEPHALINAE

2. *Cryptocephalus lefevrei* Jacoby

1895. *Cryptocephalus lefevrei* Jacoby, *Ann. Soc. Ent. Belg.*, 30 : 268.

1908. *Cryptocephalus lefevrei* : Jacoby, *Fauna Brit. India, Coleoptera : Chrysomelidae*, 1 : 224.

*Material* : 1 ex., Kerala, Silent Valley, 2. iv. 1980. R. S. Pillai.

*Distribution* : India Maharashtra and Kerala.

*Remarks* This species was recorded from Maharashtra, it is new recorded here from Kerala.

3. *Cryptocephalus* sp.

*Material* : 1 ex., Kerala, Silent Valley, 2. iv. 1980. R. S. Pillai.

*Remarks* : This species is near *C. lucifer* Saffrian but differs in its colour pattern, basal transverse depression on elytra almost absent and smaller size (4.00 mm).

The specific identity could not be ascertained with the literature available to the author.

## Subfamily EUMOLPINAE

4. **Basilepta fulvicorne** (Jacoby) Comb. nov.

1904. *Nodostoma fulvicorne* Jacoby, *Ann. Soc. Ent. Belg.*, 48 : 387.

1908. *Nodostoma fulvicorne* : Jacoby, *Fauna Brit. India, Coleoptera : Chrysomelidae*, 1 : 303.

*Material* 2 exs., Kerala, Silent Valley, 3 iv. 1980, S. Biswas.

*Distribution* : India : Tamil Nadu and Kerala.

5. **Basilepta** sp. 1

*Material* : 1 ex., Kerala, Silent Valley, 2. iv. 1980, R. S. Pillai.

*Remarks* : This species is near *B. fulvicorne* (Jacoby) but differs in having strong and close punctures on head and clypeus.

The specific identity could not be ascertained from the literature available to the author.

6. **Basilepta** sp. 2

*Material* : 2 exs., Kerala, Silent Valley, 3. iv. 1980, S. Biswas.

*Remarks* : This species is near *B. dormeri* Baly but its prothorax not angulated and one and half times broader than long, and all the femora armed with teeth.

The specific identity could not be ascertained with the literature available to the author.

7. **Colasposoma robustum** Jacoby

1881. *Colasposoma robustum* Jacoby, *Proceedings of the Scientific Meetings of the Zoological Society of London (1830—1907)* : 446.

1908. *Colasposoma robustum* : Jacoby, *Fauna Brit. India, Coleoptera : Chrysomelidae*, 1 : 450.

*Material* : 1 ex., Kerala, Silent Valley, 2. v. 1980. R. S. Pillai.

*Distribution* : India : Tamil Nadu and Kerala.

**8. *Tricliona picea* Jacoby**

1895. *Tricliona picea* Jacoby, *Ann. Soc. Ent. Belg.*, **39** : 284.  
1908. *Tricliona picea* : Jacoby, *Fauna Brit. India, Coleoptera : Chrysomelidae*, **1** : 475.

*Material* : 2 exs., Kerala, Silent Vally, 2. iv. 1980, S. Biswas.

*Distribution* India : Maharashtra and Kerala

*Remarks* : This species was recorded from Maharashtra, it is now reported from Kerala.

Subfamily GALERUCINAE

**9. *Hoplasoma nilgiriensis* Jacoby**

1904. *Hoplasoma nilgiriensis* Jacoby, *Ann. Soc. Ent. Belg.* **48** : 396.  
1936. *Hoplasoma nilgiriensis* : Maulik, *Fauna. Brit. India, Coleoptera : Chrysomelidae (Galerucinae)* : 160-161.

*Material* : 9 exs., Kerala, Silent Valley, 5. iv. 1980, S. Biswas ;  
12 exs., 25. iv. 1980, R. S. Pillai.

*Distribution* : India Tamil Nadu, Kerala and Tripura.

**10. *Hoplasoma unicolor* (Illiger)**

1800. *Galeruca unicolor* Illiger, In Wiedemann, *Arch. fuer Zool. u. Zoot.*, **1** (2) : 135.  
1889. *Hoplasoma unicolor* : Allard, *Ann. Soc. Ent. France*, **8** (6) : 327.  
1963. *Hoplasoma unicolor* : Gressitt & Kimoto, *Pacif. Ins. Monogr.* **18** : 499.

*Material* : 1 ex., Kerala, Silent Valley, 6. iv. 1980, S. Biswas.

*Distribution* : India : Tripura, Arunachal Pradesh, Meghalaya, Assam, Sikkim, West Bengal, Bihar, Orissa, Uttar Pradesh, Maharashtra, Karnataka, Kerala, Tamil Nadu and Andaman Island.

**11. *Hoplasoma dilaticornis* Jacoby**

1900. *Hoplasoma dilaticornis* Jacoby, *Mem. Soc. Ent. Belg.*, **7** : 128.  
1936. *Hoplasoma dilaticornis* : Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Galerucinae)* : 172-173.

*Material* : 2 ex., Kerala, Silent Valley, 26. iv. 1980, R. S. Pillai ;  
1 ex., 4. iv. 1980, S. Biswas.

*Distribution* : India : Bihar and Kerala.

*Remarks* : This species was recorded from N. E. India (Bihar) and now it is reported here for the first time from S. India (Kerala).

### 12. *Aulacophora nilgiriensis* Jacoby

1903. *Aulacophora (Orthaulaca) nilgiriensis* Jacoby, *Ann. Soc. Ent. Belg.*, **47** : 116.  
1936. *Aulacophora nilgiriensis* : Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Galerucinae)* : 172-173.

*Material* : 2 exs., Kerala, Silent Valley, 6. iv. 1980, S. Biswas.

*Distribution* : India : Karnataka, Kerala and Tamil Nadu.

### 13. *Aulacophora lewisi* Baly

1886. *Aulaeophora lewisi* Baly, *J. Linn. Soc. London*, **20** : 5, 24.  
1963. *Aulacophora lewisi* : Gressitt & Kimoto, *Pacif. Ins. Monogr.*, **1B** : 488-489.

*Material* : 1 ex., Kerala, Silent Valley, 22. iv. 1980, R. S. Pillai.

*Distribution* : India : Meghalaya, Assam, Bihar, Punjab, Uttar Pradesh, Maharashtra, Karnataka, Kerala and Tamil Nadu.

### 14. *Aulacophora cincta* (Fabricius)

1775. *Crioceris cincta* Fabricius, *Syst. Ent.*, : 119.  
1936. *Aulacophora cincta* : Maulik, *Fauna Brit. India, Coleoptera, Chrysomelidae (Galerucinae)* : 189-190.

*Material* : 1 ex., Kerala, Silent Valley, 22. iv. 1980, R. S. Pillai.

*Distribution* : India : Kerala and Tamil Nadu.

### 15. *Aulacophora cruenta* (Fabricius)

1792. *Galleruca cruenta* Fabricius, *Syst. Ent.* **1** (2) : 19.  
1936. *Aulacophora cruenta* : Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Galerucinae)* 194-195.  
1963. *Aulacophora cruenta* : Gressitt and Kimoto, *Pacif. Ins. Monogr.* **1B** : 486.

*Material* : 9 exs., Kerala, Silent Valley, 22. iv. 1980, R. S. Pillai.

*Distribution* : India Kerala and Tamil Nadu.

16. **Mimastracella hirsuta** Jacoby

1903. *Mimastracella hirsuta*, Jacoby, *Ann. Soc. Ent. Belg.*, 47 : 120.

1936. *Mimastracella hirsuta* : Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Galerucinae)* 208-209.

*Material* : 1 ex., Kerala, Silent Valley, 21. iv. 1980, R. S. Pillai.

*Distribution* : India : Kerala and Tamil Nadu.

17. **Decretina** sp.

*Material* : 1 ex., Kerala, Silent Valley, 21. iv. 1980, R. S. Pillai.

*Remarks* : As the specimen was badly damaged, specific identification was not possible.

18. **Monolepta signata** (Olivier)

1808. *Galeruca signata* Oliver, *Entomologie*, 6 : 665.

1889. *Monolepta signata* : Jacoby, *Ann. Mus. Civ. Genova*, 27 : 229.

1963. *Monolepta signata* : Gressitt and Kimoto, *Pacif. Ins. Monogr.*, 1B : 633-634.

*Material* : 1 ex., Kerala, Silent Valley, 21. iv. 1980, R. S. Pillai.

*Distribution* India Assam, Kerala and Tamil Nadu.

Subfamily CHRYSOMELINAE

19. **Plagioderia divisa** Jacoby

1887. *Melasoma divisa* Jacoby, *Proc. Zool. Soc. London*, : 83.

1926. *Plagioderia divisa* : Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Chrysomelinae & Halticinae)* : 66.

*Material* 1 ex., Kerala, Silent Valley, 22. iv. 1980, R. S. Pillai.

*Distribution* : India Karnataka and Kerala.

## subfamily ALTICINAE

20. *Nonarthra birmanica* (Jacoby)

1892. *Enneamera birmanica* Jacoby, *Ann. Mus. Civ. Genova* ser. 2, 12 (32) : 935.  
 1926. *Nonarthra birmanica* : Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae* (Chrysomelinae & Halticinae) : 122.  
 1969. *Nonarthra birmanica* : Scherer, *Pacif. Ins. Monogr.*, 22 : 239.

*Material* : 8 exs., Kerala, Silent Valley, 22. iv. 1980, R. S. Pillai.

*Distribution* : India Tamil Nadu, Kerala and Andaman Island.

21. *Psylliodes viridana* Motschulsky

1858. *Psylliodes viridana* Motschulsky, *Etud. Ent.*, 7 : 108.  
 1969. *Psylliodes viridana* : Scherer, *Pacif. Ins. Monogr.*, 22 : 237.

*Material* : 1 ex., Kerala, Silent Valley, 21. iv. 1980. R. S. Pillai

*Distribution* : India : Kerala and Tamil Nadu.

22. *Hyphasis intermedia* Jacoby

1892. *Hyphasis intermedia* Jacoby, *Ann. Mus. Civ. Genova*, ser. 2, 12 (32) : 937.  
 1969. *Hyphasis intermedia* : Scherer, *Pacif. Ins. Monogr.* 22 : 183.

*Material* : 1 ex., Kerala, Silent Valley, 22. iv. 1980, R. S. Pillai ;  
 4 exs., 2. vi. 1980, S. Biswas.

*Distribution* : India Kerala.

*Remarks* : This species was recorded from Burma and now it is recorded here for the first time from India (Kerala)

23. *Euphitrea indica* Jacoby

1904. *Euphitrea indica* Jacoby, *Ann. Soc. Ent. Belg.* 48 : 301.  
 1969. *Euphitrea indica* : Sceerer, *Pacif. Ins. Monogr.*, 22 : 223.

*Material* : 6 exs., Kerala, Silent Valley, 2. iv. 1980, S. Biswas ;  
 2 exs., 21. iv. 1980, R. S. Pillai.

*Distribution* : India : Kerala and Tamil Nadu.



**24. Chalaenosoma metallica** Jacoby

1893. *Chalaenosoma metallicum* Jacoby, *Trans. Ent. Soc. London*, : 157.

1969. *Chalaenosoma metallica* : Scherer, *Pacif. Ins. Monogr.*, 22 : 28.

*Material* 10 exs., Kerala, Silent Valley, Valiyaparathodu, 2. v. 1980, R. S. Pillai ; 3 exs., 5. iv. 1980, S. Biswas.

*Distribution* India : Kerala and Tamil Nadu.

**25. Chaetocnema (Chaetocnema) pusaensis** Maulik

1926. *Chaetocnema pusaensis* Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Chrysomelinae & Halticinae)* : 205-206.

1969. *Chaetocnema (Chaetocnema) pusaensis* : Scherer, *Pacif. Ins. Monogr.*, 22 : 161.

*Material* : 1 ex., Kerala, Silent Valley, 2. v. 1980, R. S. Pillai.

*Distribution* : India : Bihar, Kerala and Tamil Nadu.

**26. Chaetocnema (Chaetocnema) bretinghami** Baly

1877. *Chaetocnema bretinghami* Baly, *Trans. Ent. Soc. London*, : 170.

1969. *Chaetocnema (Chaetocnema) bretinghami* : Scherer, *Pacif. Ins. Monogr.*, 22 : 160.

*Material* : 6 exs., Kerala, Silent Valley, 5. iv. 1980, R. S. Pillai.

*Distribution* India : Bihar and Kerala.

*Remarks* This species was recorded from Bihar, it is now recorded here for the first time from Southern India (Kerala).

**27. Chaetocnema (Tlanoma) basalis** Baly

1877. *Plectroscelis basalis* Baly, *Trans. Ent. Soc. London*, 1877 : 310.

1889. *Chaetocnema basalis* : Shipley, *Proc. Cambridge Phil. Soc.*, 6 : 338.

1969. *Chaetocnema (Tlanoma) basalis* : Scherer, *Pacif. Ins. Monogr.*, 22 : 164-165.

*Material* : 1 ex., Kerala, Silent Valley, 3. iv. 1980, S. Biswas.

*Distribution* : India : Assam, Maharashtra, Kerala and Tamil Nadu.

28. *Elytropachys ? sandalensis* Bryant

1941. *Elytropachys sandalensis* Bryant, *Ann. Mag. Nat. Hist. Ser.* 11, 8 : 413.  
 1969. *Elytropachys sandalensis* : Scherer, *Pacif. Ius. Monogr.*, 22 : 93-94.

*Material* : 4 exs., Kerala, Silent Valley, 26. iv. 1980, R. S. Pillai.

*Distribution* : India : Kerala and Tamil Nadu.

*Remarks* : The specific identity could not be confirmed due to the non-availability of the required literature.

29. *Nisotra madurensis* Jacoby

1896. *Nisotra madurensis* Jacoby, *Ann. Soc. Ent. Belg.*, 40 : 267.  
 1969. *Nisotra madurensis* : Scherer, *Pacif. Ins. Monogr.*, 22 : 148.

*Material* : 8 exs., Kerala, Silent Valley, 26. iv. 1980, R. S. Pillai ;  
 7 exs., 7. iv. 1980, S. Biswas.

*Distribution* : India : Kerala and Tamil Nadu.

30. *Nisotra apicefulva* (Bryant)

1941. *Podagraca apicefulva* Bryant, *Ann. Mag. Nat. Hist. Ser.* 11, 8 : 410.  
 1969. *Nisotra apicefulva* Scherer, *Pacif. Ins. Monogr.*, 22 : 149.

*Material* : 1 ex., Kerala, Silent Valley, 25. iv. 1980, R. S. Pillai.

*Distribution* : India : Kerala and Tamil Nadu.

31. *Longitarsus belgaumensis* Jacoby

1896. *Longitarsus belgaumensis* Jacoby, *Ann. Soc. Ent. Belg.*, 40 : 260.  
 1969. *Longitarsus belgaumensis* Scherer, *Pacif. Ins. Monogr.*, 22 : 64-65.

*Material* : 1 ex., Kerala, Silent Valley, 1140m., 21. i. 1980, K. R. Rao.

*Distribution* : India : Manipur, Meghalaya, Sikkim, Bihar, Uttar Pradesh, Maharashtra, Kerala and Tamil Nadu.

**32. Luperomorpha vittata Duviver**

1892. *Luperomorpha vittata* Duvivier, *Ann. Soc. Ent. Belg.*, 36 : 427.

1969. *Luperomorpha vittata* : Scherer, *Pacif. Ins. Monogr.*, 22 : 53.

*Material* : 1 ex., Kerala, Silent Valley, 25. iv. 1980, R. S. Pillai.

*Distribution* : India : West Bengal, Bihar and Kerala.

*Remarks* : This species was recorded from North East India, it is now recorded for the first time from Southern India (Kerala).

**33. Sebaethe pallidicincta Jacoby**

1904. *Sebaethe pallidicincta* Jacoby, *Ann. Soc. Ent. Belg.*, 48 : 390.

1969. *Sebaethe pallidicincta* : Scherer, *Pacif. Ins. Monogr.*, 22 : 188.

*Material* : 2 exs., Kerala, Silent Valley, 2. v. 1980, R. S. Pillai.

*Distribution* : India : Kerala and Tamil Nadu.

**34. Sebaethe nigratarsis Jacoby**

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

1969. *Sebaethe nigratarsis* : Scherer, *Pacif. Ins. Monogr.*, 22 : 191.

*Material* : 1 ex., Kerala, Silent Valley, 23. i. 1980, S. K. Bhattacharyya.

*Distribution* : India : Kerala and Tamil Nadu.

**35. Phygasia silacea (Illiger)**

1807. *Haltica silacea* Illiger, *Mag. Insektenkunde*, 6 : 121.

1969. *Phygasia silacea* : Scherer, *Pacif. Ins. Monogr.*, 22 : 113-114.

*Material* : 2 exs., Kerala, Silent Valley, 2. v. 1980, S. Biswas.

*Distribution* : India West Bengal, Karnataka, Kerala and Tamil Nadu.

**36. Schenklingia keralaensis Basu & Sengupta (Nom. nov.)**

1981. *Schenklingia heteropunctata* Basu & Sengupta, *Oriental Ins.*, 15(3) : 269—271.

*Remarks* *Schenklingia heteropunctata* Basu & Sengupta, 1981 is a Junior homonymy of *S. heteropunctata* Samuelson, 1969, *Pacif. Ins.* 11(1) : 38, hence the name is replaced by *S. keralaensis*.

#### Subfamily HISPINAE

#### 37. *Hispa andrewesi* (Weise)

1897. *Hispella andrewesi* Weise, *Deut. Ent. Zeits.*, : 126.

1958. *Hispa andrewesi* : Uhmann, *Col. Cat. Suppl.*, 35(2) : 269.

*Material* : 1 ex., Kerala, Silent Valley, 6. v. 1980, R. S. Pillai, 1 ex., 3.iv.1980, S. Biswas.

*Distribution* : India Karnataka, Kerala and Tamil Nadu.

#### 38. *Dactylispa krishna* Maulik

1919. *Dactylispa krishna* Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Hispinae & Cassidinae)* : 181-182.

*Material* : 1 ex., Kerala, Silent Valley, 6. v. 1980, R. S. Pillai

*Distribution* India : Karnataka, Kerala and Tamil Nadu.

#### 39. *Dactylispa spinipes* Maulik

1905. *Dactylispa spinipes* Weise, *Deut. Ent. Zeits.*, : 119.

1919. *Dactylispa spinipes* : Maulik, *Fauna Brit India, Coleoptera : Chrysomelidae (Hispinae and Cassidinae)* : 182.

*Material* : 1 ex., Kerala, Silent Valley, 24.i.1980, S. K. Bhattacharyya ; 1 ex., 6.v.1980, R. S. Pillai ; 3 exs., 18.i.1980, K. R. Rao.

*Distribution* : India : Kerala and Tamil Nadu.

#### 40. *Dactylispa pitapada* Maulik

1819. *Dactylispa pitapada* Maulik, *Fauna Brit. India, Coleoptera : Chrysomelidae (Hispinae and Cassidinae)* : 212-213.

*Material* : 1 ex., Kerala, Silent Valley, 23.i.1980, S. K. Bhattacharyya ; 3 exs., 6.v.1980, R. S. Pillai.

*Distribution* : India : Kerala and Tamil Nadu.

## SUMMARY

This paper records 40 species of Chrysomelidae belonging to 7 subfamilies. Of these *Hyphasis intermedia* Jacoby is new to India and other 5 species are first record from the area.

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