

NOTES ON COLLECTION OF HISPINAE AND CASSIDINAE
(COLEOPTERA : CHRYSOMELIDAE) FROM N. E. INDIA

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(With 1 Text-figure and 1 Table)

I—INTRODUCTION

This report is based on the collection of Chrysomelidae, sub-families Hispinae and Cassidinae, (also considered of family rank by various authors) which have been collected by the various survey parties from the Zoological Survey of India in the Sikkim and NEFA regions.

These surveys were conducted by my colleagues as under :—

Dr. A. G. K. Menon	(Sikkim, 1959)	<i>A. G. K. M.</i>
Dr. K. C. Jayaramakrishnan	(NEFA, 1961)	<i>K. C. J.</i>
Shri S. Biswas	(NEFA, 1961)	<i>S. B.</i>
Shri G. Ramakrishna	(Sikkim, 1962)	<i>G. R.</i>
Dr. S. K. Bhattacharyya and Dr. A. N. T. Joseph	(NEFA, 1965)	<i>S.K.B. & A.N.T.J.</i>

This collection comprises 18 species of which one species, is new and is described below. One species viz. *Hispellinus minor* (Maulik), which was earlier known from Sumatra and Ceylon, is now being recorded from India for the first time. Besides, there are seven species which form new records from Sikkim.

II—LIST OF SPECIES

Subfamily *Hispinae*

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|---|--|
| 1. <i>Anisodera guerini</i> Baly | 12. <i>C. occursans</i> Spaeth |
| 2. <i>Dactylispa peregrina</i> Maulik | 13. <i>Sindia sedecimaculata</i>
(Boheman) |
| 3. <i>D. atkinsoni</i> (Gestro) | 14. <i>Basiprinota maculipennis</i>
<i>maculipennis</i> (Boheman) |
| 4. <i>D. manii</i> sp. n. | 15. <i>B. (B.) decemmaculata</i>
(Boheman) |
| 5. <i>Gonophora pulchella</i> Gestro | |
| 6. <i>Anisoderopsis excavata</i> (Baly) | |
| 7. <i>Hispellinus minor</i> (Maulik) | |

Subfamily *Cassidinae*

- | | |
|---|--|
| 8. <i>Aspidomorpha miliaris</i> (Fabricius) | 16. <i>B. (B.) impustulata</i>
(Boheman) |
| 9. <i>A. sanctae-crucis</i> (Fabricius) | 17. <i>Laccoptera quadrimaculata</i>
(Thunberg) |
| 10. <i>A. indica</i> Boheman | 18. <i>Epistictina viridimaculata</i>
(Boheman) |
| 11. <i>Cassida icterica</i> Boheman | |

III—SYSTEMATIC ACCOUNT

Order COLEOPTERA

Family CHRYSOMELIDAE

Subfamily HISPINAE

1. *Anisodera guerini* Baly

1858. *Anisodera guerini* Baly, *Catalogue Hispinae* : 168.

1919. *Anisodera guerini* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 35.

Material.—1 ex., Kameng Div., Anakaling, 25.v.1961 (K.C.J.)

Remarks.—This species was reported by Maulik (*l.c.*) from S. India, Maharashtra, N. Bengal, Assam, Sikkim, Burma and Java. All the abdominal sternites are not thickly and coarsely punctate as implied by Maulik (*l. c.*). The 1st and 2nd (visible) abdominal sternites are very sparsely punctate, the 3rd and 4th sternites are moderately punctate while only the last abdominal sternite is thickly and coarsely punctate.

Distribution.—India, Sikkim, Burma, Indonesia (Java).

2. *Dactylispa peregrina* Maulik

1919. *Dactylispa peregrina* Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 185.

Material.—2 exs., Kameng Div., Rupa, 3.v.1961 (K.C.J.), 2 exs., Kameng Div., Domko, 10.v.1961 (K.C.J.) ; 3 exs., Sikkim, 22.v.1962 (G.R.) ; 1 ex., Sikkim, Singlik, 9.v.1962 (G.R.) ; 1 ex., Sikkim, Keiozing, 19.v.1962 (G.R.)

Remarks.—As reported by Maulik (*l.c.*), this species occurs in the hills of N.E. India (Punjab, Uttar Pradesh, Assam, W. Bengal) and Burma. It comes close to *D. brevispinosa* Chapuis, which is also known from hills of Punjab and Assam. Sufficient number of examples belonging to the latter species are not available for detailed examination.

Distribution.—India and Burma.

3. *Dactylispa atkinsoni* (Gestro)

1897. *Hispa atkinsoni* Gestro, *Ann. Mus. Civ. Genova*, 38 : 132 (Sikkim : Mungphu)

1919. *Dactylispa atkinsoni* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 205.

Material.—1 ex., Sikkim, 22.v.1962 (G.R.).

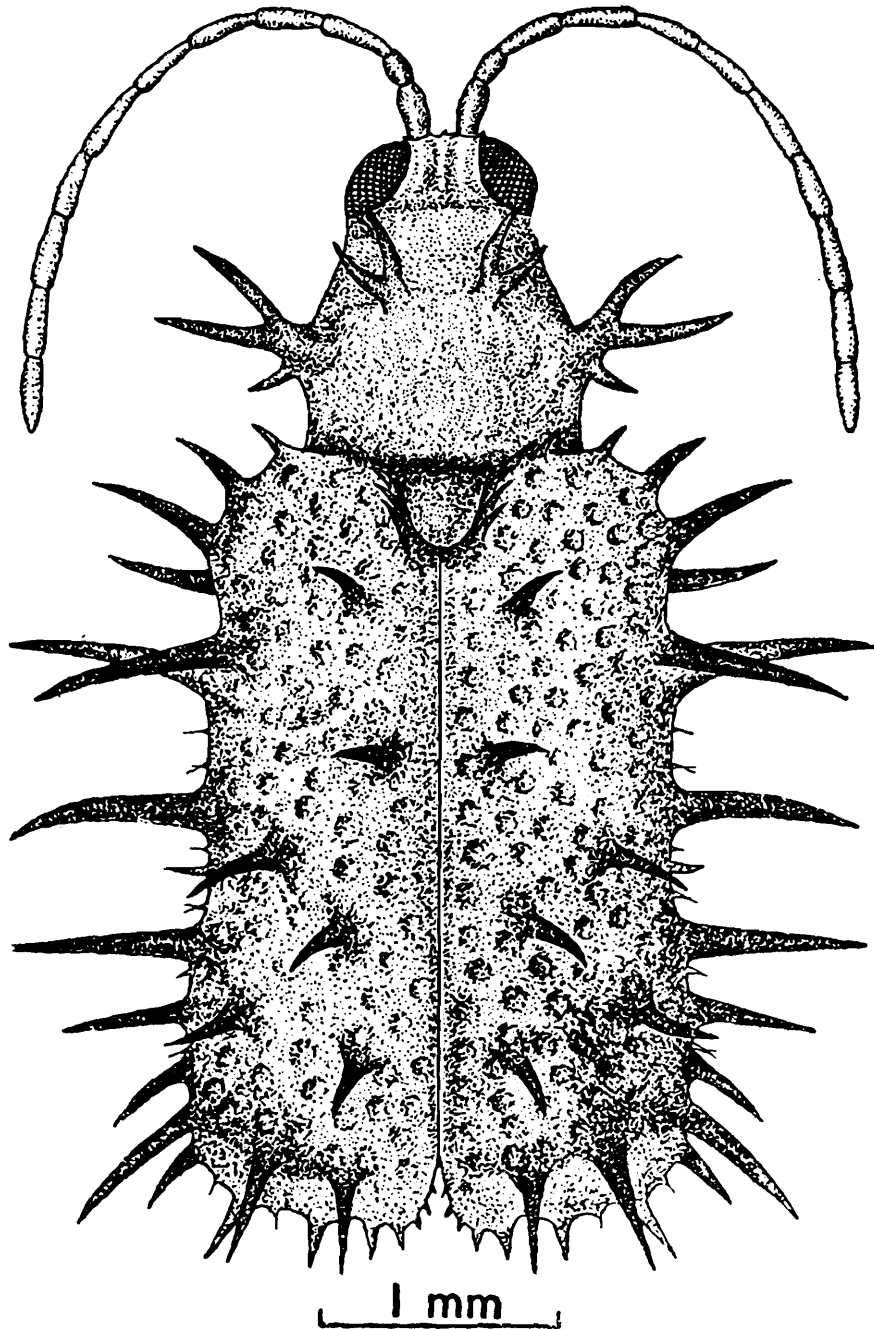
Remarks.—This species has been reported from Punjab, Uttar Pradesh : Kumaon : Bhimtal, W. Bengal : Darjeeling. It is now being reported from Sikkim for the first time.

Distribution.—India,

4. *Dactylispa manii* sp.n.

(Text-fig. 1)

Body elongate. Antennae, head, elytra, legs and most of the ventral side yellowish-brown ; disc of pronotum and elytral spines black.



TEXT-FIG. 1.—Dorsal view of *Dactylispa manii* sp. n.

Head.—Yellowish-brown, interocular space and antennae of the same colour; antennae moderate-sized, hairy, apical five segments gradually thickened; interocular space slightly depressed somewhat rough; collar and vertex smooth and shining; a row of white hairs along the inner margin of the eyes.

Pronotum.—Black colour reduced to two patches on the disc, reddish brown anteriorly and posteriorly; the surface coarsely punctate and moderately pubescent, with a narrow median longitudinal glabrous line; anterior border with two pairs of spines not very close to each other, each pair with a small stalk, front spine a little longer than posterior one; the three lateral spines having a common stalk, the first two being almost equal and parting at a higher level than the third, the latter being much smaller and emanating almost from base of the stalk; all spines reddish brown.

Scutellum.—Reddish brown, surface with very fine tubercles giving it a rough appearance, five minute spines on each side of scutellar ridge.

Elytra.—Reddish brown; sides not broadly expanded anteriorly or posteriorly; surface more or less punctate-striate, punctures large and quite close to each other, with fine hairs arising out of punctures; each elytron with ten black spines disposed as under.—(i) 4 small spines arranged in an irregular sub-sutural row (ii) 3 spines arranged in an irregular sublateral row, the anterior most spine being much longer than other two (iii) 3 spines arranged in a sub-apical transverse row; besides discal spines, the lateral margin, from the humeral to the sutural angle having 15 spines (4-5 on apical margin, being yellowish brown and others black).

Length—4.5 mm; Breadth 3.5 mm.

Holotype : INDIA : NEFA : Kameng Div. : Amatulla River bank, 2 km. south of Ama town, 8.iii. 1961 (K.C.J.) in Z.S.I. Colln.

Remarks.—In Maulik's (1919), key to species known from India, it comes close to *D. tissa* Maulik, from which it differs in (i) the sculpture of pronotum (ii) ventral side reddish brown vs. black (iii) colouration of antennal segments (iv) scutellum reddish brown pitch-black (v) in number of spines from humeral angle to sutural angle. In Gressitt and Kimoto's key (1963), this species also comes close to *D. mauliki* Gressitt in the elytra having fine hairs arising from punctures and each elytron having 10 black spines but differs from it in having the 10 spines on each elytron not so large and pronotum not entirely black. It also differs from *D. filiola* Weise, in which the lateral spine 3 (i.e. most posterior) of pronotum arises from base of the trunk of anterior two spines but this spine in the present species is shorter than other two spines as against as long as spine 1.

5. *Gonophora pulchella* Gestro

1888. *Gonophora pulchella* Gestro, *Ann. Mus. Civ. Genova*, (6) 26 : 176 (Burma : Smegeo-Myo Bhomo Tenasserim).
 1919. *Gonophora pulchella* : Maulik, *Fauna British India, Chrysomelidae : Hispinae, Cassidinae* : 146.
 1963. *Gonophora pulchella* : Gressitt et Kimoto, *Pac. Ins. Mon.*, 1 B : 911.

Material.—Sikkim : 1 ex. Rhenock, 3.v.1962 (G. R.)

Rémarks.—The above example is slightly longer (6.0 mm) than the measurements given by Maulik (*l.c.*) viz. 5.5 mm. It is previously reported in India from W. Bengal, Assam, Manipur. It is now being recorded from Sikkim for the first time.

Distribution.—India, Burma, Indo-China, Hainan Island.

6. *Anisoderopsis excavata* (Baly)

1858. *Anisodera excavata* Baly, *Catalogue Hispinae* : 105.

1919. *Anisoderopsis excavata* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 37.

Material.—Sikkim : 2 exs., Rishikhodo, 994 m., 7. v .1959
(A.G.K.M.)

Remarks.—This species is earlier reported from India : W. Bengal : Darjeeling, Assam, Cachar, Burma and Tonkin. It is now being recorded from Sikkim for the first time.

While the longitudinal rows of punctures on elytra are ten, their relative disposition and confluence appear to be variable. In addition there are a few scattered punctures present particularly on the sides.

Distribution.—India, Burma, Vietnam (Tonkin).

7. *Hispellinus minor* (Maulik)

1919. *Monochirus minor* Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 155 (Ceylon : Trincomalee ; Sumatra : Nahat).

Material.—NEFA : 1 ex., Kameng Div., 28 xii.1965 (S.K.B. and A.N.T.J.)

Remarks.—This species is known from Sumatra and Ceylon. The present record from N. E. India fills the gap in its distribution and is of zoogeographical importance. It is being recorded from India for the first time.

Distribution.—India, Ceylon and Sumatra.

Subfamily Cassidinae

8. *Aspidomorpha miliaris* (Fabricius)

1775. *Cassida miliaris* Fabricius, *Syst. Ent., Flensburgei et Lipsiae* : 91 (St. Helenae).

1919. *Aspidomorpha miliaris* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 334.

1963. *Aspidomorpha miliaris* : Gressitt et Kimoto, *Pac. Ins. Mon.*, 1 B, : 952.

Material.—Assam : 1 ex., Tezpur, 1.i.1966 (S.K.B. & A.N.T.J.).

Remarks.—This species is very widely distributed in the Oriental region. In India also it is very common. Colour variation etc. have been adequately discussed by Maulik (*l.c.*) and Gressitt et Kimoto (*l.c.*).

Distribution.—India, Burma, S. China (Yunnan, Hong Kong), Hainan I., Vietnam, Malaya, Indonesia, Celebes, Philippines, New Guinea.

9. *Aspidomorpha sanctae-crucis* (Fabricius)

1794. *Cassida St. crucis* Fabricius, *Ent. Syst.*, Hafniae, 4 : 446.
 1919. *Aspidomorpha sanctae-crucis* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 329.
 1963. *Aspidomorpha sanctae-crucis* : Gressitt et Kimoto, *Pac. Ins. Mon.*, 1 B : 953.

Material.—Assam : 1 ex., Missamari, 28. xi. 1965 (S.K.B. & A.N.T.J.).

Remarks.—This species is widely distributed in India from south to the base of Himalaya in the north. It generally occurs in abundance and shows considerable variation in size.

Distribution.—India, Ceylon, Burma, S. China, Hainan, Vietnam, Thailand, Malaya, Sunda-Islands.

10. *Aspidomorpha indica* Boheman

1854. *Aspidomorpha indica* Boheman, *Monograph Cassidinae*, 2 : 318.
 1919. *Aspidomorpha indica* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 327.
 1963. *Aspidomorpha indica* : Gressitt et Kimoto, *Pac. Ins. Mon.*, 1 B : 952.

Material.—Sikkim : 1 ex., Thomhyak, 31. v. 1959 (A.G.K.M.) ; NEFA : 1 ex., Kalaktang, Sangloom, 2288 m, 11.ix.1961 (S. B.).

Remarks.—Maulik (*l.c.*) recorded this species from India : Madras : Samalkot, Godavari Dist. and Sikkim : Darjeeling (now in W. Bengal). There is no other record of this species from India since then and it is now being recorded from Sikkim and NEFA for the first time.

Distribution.—India.

11. *Cassida icterica* Boheman

1854. *Cassida icterica* Boheman, *Monograph Cassidinae*, 2 : 400 (Almora).
 1919. *Cassida icterica* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 380.

Material.—Sikkim : 1 ex., 19.iii.1959 (A.G.K.M.).

Remarks.—So far this species is known only from its type-locality viz., Uttar Pradesh : Almora. It is now being recorded from Sikkim for the first time.

Distribution.—India.

12. *Cassida occursans* Spaeth

1914. *Cassida occursans* Spaeth, *Deut. Ent. Zeits.* : 560 (Sikkim : Mungphu. Assam ; Boroma)
 1919. *Cassida occursans* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 395.

Material.—NEFA : Kameng Div. : 2 exs. Dengri, 15.v.1961 ; 1 ex., Ankaling, 26. v. 1961 ; 1 ex., Ankaling, 25.v.1961 (K.C.J.).

Remarks.—Maulik (*l.c.*) p. 395, has stated “Body more or less oblong, twice as long as broad.....” This cannot be true since the measurements given by him on p.396 are “Length 7.5 mm ; breadth 5.4 mm.” The present examples measure 7.0-7.2 mm in length and 5.4-5.5 mm. in breadth. In the collections of the Zoological Survey of India there are examples from Abor expedition and Burma ; these examples are a little dark reddish brown, slightly larger in size and with deeper punctures on the elytra, than in the above examples.

Distribution.—India and Burma.

13. *Sindia sedecimmaculata* (Boheman)

1856. *Cassida sedecimmaculata* Boheman, *Catalogue Col. Ins. Brit. Mus.*, 9 : 119 (Sikkim : Mungphu).
 1919. *Sindia sedecimmaculata* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 343-344.
 1963. *Sindia sedecimmaculata* : Gressitt *et* Kimoto, *Pac. Ins. Mon.*, 1 B : 954-955.

Material.—NEFA : Kameng Div., 1 ex., Dengzi, 15.v.1961 ; 2 exs., same locality, 25.v.1961 (K.C.J.).

Remarks.—In India this species is known only from its type-locality viz. Sikkim : Mungphu. It is now being recorded from NEFA region for the first time. Since its description in 1856 by Boheman, it has been reported from S.W. China (Kweichow) by Chen, 1935.

Distribution.—India and China.

14. *Basiprionota* (s. str.) *maculipennis* (Boheman)

1850. *Prioptera maculipennis* Boheman, *Monograph Cassidinae*, 1 : 50.
 1919. *Prioptera maculipennis* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 313.

Material.—Assam : 1 ex., Lushai hills, Nausel, 1219 m., 16.ix.1960 (F. Schmid) ; NEFA : 1 ex., Kameng Div. : Diefam hill, 21.v.1961 (K.C.J.).

Remarks.—In India this species is reported by Maulik (*l.c.*) from Nepal : Dekhut, Assam : Mangaldai Dist. and Bhutan frontier. This species is widely distributed from India to Hainan. Gressitt (1938) considers Hainan's specimens to belong to the subspecies *reducta* Gressitt. Thus the specimens from India belong to the nominotypical subspecies.

Distribution.—Nepal and India.

15. *Basiprionota* (s. str.) *decemmaculata* (Boheman)

1850. *Prioptera decemmaculata* Boheman, *Monograph Cassidinae*, 1 : 60.
 1919. *Prioptera decemmaculata* : Maulik, *Fauna British India, Chrysomelidae (Hispinae, Cassidinae)* : 314-316.

Material.—Sikkim : 1 ex., Makaibari, 30 iv.1962 (*S. Ali*) ; NEFA : Kameng Div., 1 ex., 10.iii.1961 ; 1 ex., Ankaling, 24.v.1961 ; 1 ex., same locality, 25.v.1961 (*K.C.J.*).

Remarks.—This species is recorded by Maulik (*l.c.*) from Sikkim : Mungphu ; Assam and Burma.

Distribution.—India and Burma.

16. *Basiprionota* (s. str.) *impustulata* (Boheman)

1850. *Prioptera impustulata* Boheman, *Monograph Cassidinae*, 1 : 46.

1919. *Prioptera impustulata* : Maulik, *Fauna British India, Chrysomelidae (Hispinæ & Cassidinae)* : 316.

Material.—Sikkim : 1 ex., Toong, 31.vii. 1959 (*A.G.K.M.*).

Remarks.—Maulik (*l.c.*) records this species from Assam only. In the collection of the Zoological Survey of India, there is one example labelled : Calc. Nov. 18 (which means Calcutta, November 1918) and has been identified by Maulik. In the example under report, the head is black and not yellowish brown as per description given by Maulik. This factor, however, I believe to be within the range of individual variation. This is the first record of this species from Sikkim. It is also slightly larger in size (11.0 X 9.5 mm) as against 10.5 X 9.0 mm, the measurements given by Maulik (*l.c.*).

17. *Laccoptera quadrimaculata* (Thunberg)

1789. *Cassida quadrimaculata* Thunberg, *Nov. Ins. Spec.*, 5 : 86 (China).

1919. *Laccoptera quadrimaculata* : Maulik, *Fauna British India, Chrysomelidae (Hispinæ : Cassidinae)* : 347.

1963. *Laccoptera quadrimaculata* : Gressitt *et* Kimoto, *Pac. Ins. Mono.*, 1 B : 956.

Material.—Sikkim : 1 ex., Chufun fun, 24.vii.1959 ; 1 ex., Gangtok, 16.viii.1959 (*A.G.K.M.*).

Remarks.—This species is very widely distributed both in India and the Oriental region.

Distribution.—India, Burma, Andaman Islands, S. China, Taiwan, Indo-China, East Indies.

18. *Epistictina viridimaculata* (Boheman)

1850. *Epistictia viridimaculata* Boheman, *Monograph Cassidinae*, 1 : 15 (Nepal).

1919. *Epistictia viridimaculata* : Maulik, *Fauna British India, Chrysomelidae (Hispinæ, Cassidinae)* : 320.

1963. *Epistictina viridimaculata* : Gressitt *et* Kimoto, *Pac. Ins. Mon.*, 1 B : 945.

Material.—Sikkim : 1 ex., Lingjok, 20.v.1962 (*G.R.*).

Remarks.—This species is known in India from Punjab and Assam. It is now being recorded from Sikkim for the first time.

Distribution.—Nepal, India, Burma, S. W. China, Vietnam, Thailand, Malacca.

TABLE 1.—Showing distribution of species in the Oriental Region.

	Ceylonese sub-region	Indian sub-region	Indo-Chinese sub-region	Indo-Malay sub-region	
Subfamily HISPINAE					
<i>Anisodera guerini</i>		—	—	—	
<i>Dactylispa peregrina</i>			—		
<i>D. atkinsoni</i>			—		
<i>D. manii</i>			—		
<i>Gonophora pulchella</i>			—	—	
<i>Anisoderopsis excavata</i>			—		
<i>Hispellinus minor</i>	—	—	—	—	
Subfamily CASSIDINAE					
<i>Aspidomorpha miliaris</i>	—		—	—	Widely distributed.
<i>A. santae-crucis</i>	—	—	—	—	Widely distributed.
<i>A. indica</i>	—	—	—		
<i>Cassida icterica</i>			—		
<i>Cassida occursans</i>			—		
<i>Sindia sedecimaculata</i>			—		
<i>Basiprionota (B.) maculipennis maculipennis</i>			—		
<i>B. (B.) decempunctata</i>			—		
<i>B. (B.) impustulata</i>		—	—		
<i>Laccoptera quadrimaculata</i>	—	—	—	—	Widely distributed.
<i>Epistictina viridimaculata</i>	—	—	—	—	
	6	7	18	(4+3=7)	

IV—SUMMARY

This is a report on a collection of Hispinae and Cassidinae (Chrysomelidae) made during the faunistic survey of Sikkim and NEFA by the Zoological Survey of India between 1959-1965. Of the 18 species, one is described as new viz. *Dactylispa manii* and 7 species are being recorded from Sikkim for the first time.

Out of 18 species, 3 species are widely distributed and 11 species are endemic to N.E. India including Burma.

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