NOTES ON SIX HISTERID BEETLES FROM SOUTHERN ASIA
(COLEOPTERA : HISTERIDAE)

By MASAHIRO ÖHARA

Research Trips for Agricultural and Forest Insects in the Subcontinent of India,

Abstract

Ins. matsum. n. s. 42 : 31-46, 4 tabs., 11 figs.
Six species of histerid beetles collected from India, Nepal, Pakistan and Thailand and belonging to 4 genera, are revised. Of them, Platylomalus calcuttanus is described as new to science, and Onthophilus sculptilis and Hister javanicus are new to Thailand and Nepal respectively. The male genitalia of Hister encaustus, H. squalidus and Margarinotus (Paralister) indicola are illustrated for the first time.

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INTRODUCTION

The present paper deals with 6 species of the family Histeridae from India, Nepal, Pakistan and Thailand. Of them, Platylomalus calcuttanus is described as new to science, and Onthophilus sculptilis Lewis and Hister javanicus Paykull are newly recorded from Thailand and Nepal respectively. Hister encaustus Marseul, H. squalidus Erichson and Margarinotus indiicola (Desbordes) are briefly described, and illustrated for some features.

This paper is based on material collected by members of Entomological Institute, Faculty of Agriculture, Hokkaido University, and also on specimens offered by Mr. K. Masumoto, Mr. M. Ishida and Mr. H. Sawada for my study. I am deeply grateful to all of them. I wish to express cordial thanks to Prof. S. Takagi, Hokkaido University, for his critical advice in preparing the manuscript, and Dr. T. Nakane, Chiba, for his encouragement.

ENUMERATION

The subfamily Onthophilinae

1. Onthophilus sculptilis Lewis, 1892

(Fig. 1, 2)


Remarks. Lewis (1892) noted that this species is similar to O. alternatus (Say) from the Alleghany subregion of North America. This species is apparently similar to alternatus, which is studied by Helava (1978) in his revision of the Nearctic species of Onthophilus, in male genitalic characters. However, in general facies it is more similar to nodatus than to alternatus. Anyway, it is evidently included in the alternatus-group in Helava's sense. This species and the American species of alternatus-group are widely separated geographically, and their distribution may present another example to the eastern Asia - eastern North America distribution in biogeography (Brown and Gibson, 1983). Biometric data are given in Table 1.

Distribution. Burma; West Bengal; Nepal; Thailand. New to Thailand.
Fig. 1. *Onthophilus sculptilis* Lewis from Nepal. A: Female, adult, dorsal view. B: Ditto, ventral view. C: Head, frontal view. D: Propygidium and pygidium.

Fig. 2. Male genitalia and genital segments of *Onthophilus sculptilis* Lewis. A: Aedeagus, dorsal view. B: Ditto, lateral view (Bp: Basal piece). C: 8th tergite and sternum, dorsal view. D: Ditto, lateral view. E: 9th tergite, 9th sternum (spicules) and 10th tergite, dorsal view. F: Ditto, lateral view.
Table 1. Biometric data for *Onthophilus sculptilis* Lewis.

<table>
<thead>
<tr>
<th>Part measured</th>
<th>Nepal Male</th>
<th>Nepal Female</th>
<th>Thailand Male</th>
<th>Thailand Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>APW</td>
<td>0.58</td>
<td>0.70</td>
<td>0.61-0.67</td>
<td>0.58-0.73</td>
</tr>
<tr>
<td>PPW</td>
<td>1.14</td>
<td>1.46</td>
<td>1.23-1.35</td>
<td>1.26-1.43</td>
</tr>
<tr>
<td>PL</td>
<td>0.70</td>
<td>0.85</td>
<td>0.70-0.73</td>
<td>0.67-0.76</td>
</tr>
<tr>
<td>EL</td>
<td>1.32</td>
<td>1.75</td>
<td>1.32-1.40</td>
<td>1.32-1.46</td>
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<tr>
<td>EW</td>
<td>1.55</td>
<td>2.00</td>
<td>1.61-1.75</td>
<td>1.61-1.81</td>
</tr>
<tr>
<td>ProW</td>
<td>0.57</td>
<td>0.73</td>
<td>0.53-0.67</td>
<td>0.61-0.64</td>
</tr>
<tr>
<td>ProL</td>
<td>0.44</td>
<td>0.58</td>
<td>0.47-0.58</td>
<td>0.47-0.53</td>
</tr>
<tr>
<td>PyL</td>
<td>0.64</td>
<td>0.71</td>
<td>0.58-0.67</td>
<td>0.56-0.64</td>
</tr>
<tr>
<td>PTL</td>
<td>0.64</td>
<td>0.76</td>
<td>0.58-0.67</td>
<td>0.53-0.64</td>
</tr>
<tr>
<td>MSTL</td>
<td>0.67</td>
<td>0.79</td>
<td>0.64-0.70</td>
<td>0.58-0.67</td>
</tr>
<tr>
<td>MTTL</td>
<td>0.88</td>
<td>0.94</td>
<td>0.73-0.82</td>
<td>0.70-0.82</td>
</tr>
</tbody>
</table>

Measurements in mm. APW — width between anterior angles of pronotum; PPW — width between posterior angles of pronotum; PL — length of pronotum in middle; EL — length of elytron along sutural line; EW — maximal width between outer margins of elytra; ProW — maximal width of propygidium; ProL — length of propygidium in mesial; PyL — length of pygidium; PTL — length of protibia; MSTL — length of mesotibia; MTTL — length of metatibia. The table reads: observed limits (mean± standard error) number of specimens measured.

The subfamily Dendrophilinae

2. *Platylomalus calcuttanus* M. Ohara, sp. nov. (Fig. 3, 4, 5)

Description. ♂♀. Body length, PPL (=length between anterior angles of pronotum and apex of pygidium) 1.58-1.89 mm, PEL (=length between anterior angles of pronotum and apices of elytra) 1.46-1.73 mm. Width, 1.06-1.25 mm. Biometric data are given in Table 2. Body oblong, deep brownish-black and shining.

Head evenly, sparsely and distinctly covered with small punctures. Supraorbital stria well impressed, obsolete for lateral third on each side. Frontal stria complete (Fig. 3-D).

Pronotum length to width 1 : 1.65, its sides evenly arcuate and weakly convergent anteriorly. Marginal stria usually complete, sometimes interrupted behind head. Surface finely and evenly punctate, the punctures largest sublaterally (in an area from about lateral fifth to two-fifths), fine along the margin, and fine and sparser behind head and mediobasally.

Elytra (Fig. 4-A) together a little broader than long, sides evenly arcuate from base to apex. Epipleura with marginal epipleural and marginal elytral striae, the former present on apical half, the latter well impressed, complete and its apical end extending near to lateral two-thirds of apical width of elytron. Elytra moderately

Table 2. Biometric data for *Platylomalus calcuttanus* M. Ohara, sp. nov.

<table>
<thead>
<tr>
<th>Part measured</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.53-0.59 (0.56 ± 0.005) 15</td>
<td>0.51-0.59 (0.55 ± 0.007) 10</td>
</tr>
<tr>
<td>APW</td>
<td>0.98-1.14 (1.07 ± 0.013) 15</td>
<td>1.00-1.12 (1.08 ± 0.010) 10</td>
</tr>
<tr>
<td>PPW</td>
<td>0.55-0.63 (0.59 ± 0.005) 15</td>
<td>0.57-0.65 (0.59 ± 0.007) 10</td>
</tr>
<tr>
<td>PL</td>
<td>0.92-1.14 (1.03 ± 0.015) 15</td>
<td>0.96-1.10 (1.05 ± 0.014) 10</td>
</tr>
<tr>
<td>EL</td>
<td>1.06-1.25 (1.17 ± 0.017) 15</td>
<td>1.10-1.22 (1.18 ± 0.010) 10</td>
</tr>
<tr>
<td>EW</td>
<td>0.49-0.61 (0.54 ± 0.009) 14</td>
<td>0.51-0.63 (0.56 ± 0.010) 10</td>
</tr>
<tr>
<td>ProW</td>
<td>0.18-0.24 (0.20 ± 0.004) 14</td>
<td>0.18-0.24 (0.20 ± 0.005) 10</td>
</tr>
<tr>
<td>ProL</td>
<td>0.20-0.29 (0.26 ± 0.007) 13</td>
<td>0.20-0.27 (0.24 ± 0.007) 10</td>
</tr>
<tr>
<td>PyL</td>
<td>0.35-0.43 (0.39 ± 0.006) 15</td>
<td>0.37-0.41 (0.39 ± 0.003) 10</td>
</tr>
<tr>
<td>PTL</td>
<td>0.29-0.37 (0.33 ± 0.005) 15</td>
<td>0.31-0.35 (0.33 ± 0.005) 10</td>
</tr>
<tr>
<td>MSTL</td>
<td>0.35-0.43 (0.39 ± 0.006) 15</td>
<td>0.39-0.41 (0.40 ± 0.003) 9</td>
</tr>
</tbody>
</table>
Fig. 4. *Platylomalus calcuttanus* M. Ōhara, sp. nov. A: Pronotum and left elytron. B: Prosternum, mesosternum, metasternum and 1st abdominal sternum. C: Pygidium, male and female.

and densely punctate, excepting the scutellar region and a narrow area along the sutural line which are finely punctulate. Humeral depression present on basal third of lateral half of elytron oblique and shallow. Punctuation around the depression coarse and dense.

Propygidium sparsely covered with fine punctures. Pygidium convex and evenly covered with microscopic punctures. In female, the punctures becoming coarser along the basal margin (Fig. 4-C).

Anterior margin of prosternal lobe broadly truncate (Fig. 3-C, 4-B) and its disk sparsely with fine punctures. Marginal stria of lobe present on basal half. Carinal striae of keel well impressed, divergent anteriorly and posteriorly, and not meeting at either end. Anterior mesosternal margin strongly emarginate at middle. Marginal stria of mesosternum present on each lateral side, cariniform, absent anteriorly, and continuous with the metasternal stria. Disk of metasternum sparsely with microscopic punctures throughout and with transverse stria (Fig. 4-B) which is rather coarsely subcariniform. Meso-metasternal suture narrowly represented by a smooth line at middle. Intercoxal disk of metasternum sparsely clothed with microscopic punctures. Lateral disk sparsely with coarse punctures and with postcoxal stria which is extending along mesocoxal cavity and strongly sinuates at outer end. Lateral metasternal stria coarsely impressed, extending obliquely and outwardly, and reaching the posterior coxal cavity. Intercoxal disk of 1st abdominal sternum sparsely clothed with microscopic punctures and 1st abdominal stria present on each lateral side.

Protibia (Fig. 3-E) with 4 denticles on outer margin. Mesotibia with 4 spinules on outer margin. Metatibia with 2 spinules near apex.

Male genitalia: as shown in Fig. 5.

Fig. 5. Male genitalia and genital segments of *Platylomalus calcuttanus* M. Ohara, sp. nov.

Remarks. This species is similar to *Platylomalus indicus* (Lewis, 1892) but distinguished by the carinal striae of prosternal keel not connected with apical and basal end (Fig. 3-C, 4-B), and the male pygidium not engraved with perpendicular furrows or deep scratches.

The holotype and about half of paratypes of this species are deposited in the Entomological Institute, Faculty of Agriculture, Hokkaidō University, Sapporo, and the other paratypes are in the Zoological Survey of India.

Distribution. India (West Bengal and Himachal Pradesh).
The subfamily Histerinae

3. *Hister encaustus* Marseul, 1854
(Fig. 6, 9A)

*Hister encaustus* Marseul, 1854: 211, f. 29 [India]; Desbordes, 1919: 386.

Additional notes. The specimens examined in this study nearly agree with Marseul's (1854) description, but the following additional notes may be useful for the identification of this species.

Elytral striation: 1st-3rd dorsal striae complete; 4th present on apical fourth to fifth, usually represented by a few punctures; 5th rarely present on apical fifth; sutural stria often present on apical half; internal subhumeral stria present on apical half (Fig. 6-A, B). Punctuation of pygidia as shown in Fig. 9-A. Profemur completely with posterior marginal stria (Fig. 6-G). Male and female genitalia are shown in Fig. 6-H, I, J, K, L.


Distribution. India; Sri Lanka.

4. *Hister javanicus* Paykull, 1811
(Fig. 7A-J, M, N, 8, 9B-C)

*Hister javanicus* Paykull, 1811: 30 [Java].
*Hister septemstriatus* Dejean, 1821: 47, nom. nud.

Diagnosis. ♀♂. Body length, PPL 4.1-6.7 mm, PEL 3.8-4.8 mm. Width, 3.5-4.6 mm. Biometric data are given in Table 3. Body oval, strongly convex and black.

Frontal stria of head complete, its apical portion straight (Fig. 7-C). Vertex feebly depressed at middle.

Pronotal marginal stria complete. Outer lateral stria usually present on apical half, sometimes its basal end extending to basal two-thirds (Fig. 7-A).

Epipleural fossette of elytron with three striae. Subhumeral stria usually absent, external one rarely represented by an arc (Fig. 7-A, 8, see also Remarks). Elytral dorsal striae variable; 1st-3rd dorsal striae usually complete, sometimes 3rd interrupted at apical third to middle; 4th dorsal variable from a complete development to total absence, often interrupted at apical third to middle and sometimes represented only by apical and basal rudiments; 5th dorsal usually present on apical fourth, often absent; sutural usually present, sometimes beginning at middle and ending at apical fourth, but often reduced and sometimes absent.

Propygidium feebly depressed on each lateral side, shining, sparsely covered with large punctures and microscopical ones throughout. Pygidium sparsely covered with large punctures only along the basal margin, and shining and convex (Fig. 9-B).

Prosternal lobe rounded at apex, its marginal stria complete. Disk of lobe usually large-punctate, sometimes the punctures fine. Prosternal keel even, without
### Table 3. Biometric data for *Hister javanicus* Erichson from India and Nepal.

<table>
<thead>
<tr>
<th>Part measured</th>
<th>India Male</th>
<th>India Female</th>
<th>Nepal Male</th>
<th>Nepal Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.32-1.63 (1.54±0.025) 16</td>
<td>1.57-1.69 (1.60±0.017) 7</td>
<td>1.51</td>
<td></td>
</tr>
<tr>
<td>APW</td>
<td>3.01-3.83 (3.57±0.065) 16</td>
<td>3.51-3.89 (3.68±0.047) 7</td>
<td>3.32</td>
<td></td>
</tr>
<tr>
<td>PPW</td>
<td>1.51-2.07 (1.84±0.045) 16</td>
<td>1.88-2.07 (1.94±0.032) 7</td>
<td>1.69</td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>2.07-2.82 (2.49±0.051) 16</td>
<td>2.51-2.76 (2.60±0.036) 7</td>
<td>2.26</td>
<td></td>
</tr>
<tr>
<td>EL</td>
<td>3.48-4.52 (4.15±0.077) 16</td>
<td>4.08-4.58 (4.30±0.064) 7</td>
<td>3.83</td>
<td></td>
</tr>
<tr>
<td>EW</td>
<td>2.01-2.76 (2.49±0.055) 16</td>
<td>2.38-2.89 (2.61±0.059) 7</td>
<td>2.07</td>
<td></td>
</tr>
<tr>
<td>ProW</td>
<td>0.82-1.16 (1.02±0.023) 16</td>
<td>0.94-1.07 (1.00±0.014) 7</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>ProL</td>
<td>1.00-1.35 (1.21±0.024) 16</td>
<td>1.25-1.38 (1.31±0.018) 7</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td>PyL</td>
<td>1.07-1.38 (1.25±0.023) 16</td>
<td>1.19-1.32 (1.25±0.013) 7</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>PTL</td>
<td>1.19-1.38 (1.27±0.021) 7</td>
<td>1.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSTL</td>
<td>1.32-1.69 (1.59±0.030) 16</td>
<td>1.57-1.76 (1.65±0.028) 7</td>
<td>1.44</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 8. Infraspecific variations in the elytral striation of *Hister squalidus* and *H. javanicus*, arranged according to the degree of development of the striation.

Carinal stria.

Anterior margin of mesosternum (Fig. 7-B) emarginate at middle, its marginal stria complete, and another stria present behind each apical angle. Mesometasternal suture obsolete at middle. Lateral mesosternal stria extending obliquely and posteriorly, and united with oblique stria, the united part forming an arc. Intercoxal disk impunctate. Lateral disk with a posterior mesocoxal stria, and coarsely and setaceously punctured. First abdominal sternum completely striate on

each side of intercoxal disk.

Protibia with 3 denticles (Fig. 7-D, E). Ventral surface of profemur with posterior marginal stria on whole length (Fig. 7-F).

Male genitalia: as shown in Fig. 7-G, H, I, J.

Female genitalia: as shown in Fig. 7-M.

The above diagnosis is based on material from India. Another specimen has been available from Nepal as given below. It almost agrees with the Indian form, but smaller (Table 2). Elytron with short inner subhumeral stria (Fig. 8). Prosternal lobe finely punctate. Pygidium with punctures on basal half (Fig. 9-C). No difference in female genitalia (Fig. 7-N).


Remarks. This species is most closely related to *Hister squalidus* Erichson from the Indo-Chinese Subregion, but distinguished by the punctuation of pygidium (Fig. 9) and the striation of elytron (Fig. 8). No difference has been found in the male genitalia except for the shape of the basal piece (Fig. 7-J, L).

According to Marseul's (1854) description and Desbordes's (1919) key, specimens having a subhumeral stria may be identified with *H. coracinus* Erichson. However, in the present material the elytral dorsal and subhumeral striae show a wide variation as mentioned in the diagnosis. I have concluded, therefore, that those
specimens which have a subhumeral stria should be identified with *H. javanicus* and that this rare type of striaion is nothing but an infraspecific variation. Accordingly *H. coracinus* might be a synonym of *H. javanicus* in contradiction to Desbordes (1915, 1919) and Marseul (1854), who maintained that these two species were separated by the subhumeral stria.

The female specimen from Nepal clearly shows the subhumeral stria in an arc (Fig. 8). Moreover, it has a rather wide punctuation area on the pygidium (Fig. 9). This specimen does not agree with Marseul’s and Desbordes’s descriptions of *javanicus* as mentioned above, but I identify it with *javanicus* because I have found no distinct characters in the female genitalia and other external characters.

Distribution. Java; India; Sri Lanka; Tenasserim; Nepal. New to Nepal.

5. *Hister squalidus* Erichson, 1834

*(Fig. 7K–L, 0, 8, 9D)*


Diagnosis. Almost agreeing with *Hister javanicus*, being slightly different as follows:  –  . Body a little larger than *javanicus*. Body length, PPL 5.5–7.1 mm, PTL 4.2–5.4 mm. Width, 3.8–4.8 mm. Biometric data are given in Table 4. Elytron without subhumeral striae. Dorsal elytral 4th stria complete, 3rd present on apical third, sometimes becoming shorter (Fig. 8). Pygidium coarsely punctate on basal three-fourths (Fig. 9–D). Prosternal lobe covered with moderate punctures, the punctures becoming coarser laterally. Basal piece of male genitalia slightly swollen at middle (Fig. 7–L).


Table 4. Biometric data for *Hister squalidus* Erichson from Thailand.

<table>
<thead>
<tr>
<th>Part measured</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>APW</td>
<td>1.51–1.69 (1.62±0.017) 10</td>
<td>1.44–1.82 (1.63±0.040) 10</td>
</tr>
<tr>
<td>PPW</td>
<td>3.45–3.83 (3.70±0.033) 10</td>
<td>3.20–4.20 (3.75±0.098) 10</td>
</tr>
<tr>
<td>PL</td>
<td>1.76–2.51 (2.02±0.060) 10</td>
<td>1.69–2.26 (1.98±0.058) 10</td>
</tr>
<tr>
<td>EL</td>
<td>2.38–2.76 (2.59±0.037) 10</td>
<td>2.32–2.95 (2.65±0.066) 10</td>
</tr>
<tr>
<td>EW</td>
<td>3.83–4.39 (4.23±0.048) 10</td>
<td>3.70–4.83 (4.30±0.114) 10</td>
</tr>
<tr>
<td>ProW</td>
<td>2.32–2.70 (2.61±0.037) 10</td>
<td>2.23–3.14 (2.65±0.095) 10</td>
</tr>
<tr>
<td>ProL</td>
<td>0.88–1.07 (0.97±0.018) 10</td>
<td>0.82–1.19 (0.97±0.034) 10</td>
</tr>
<tr>
<td>PyL</td>
<td>1.07–1.32 (1.23±0.020) 10</td>
<td>1.13–1.44 (1.28±0.036) 10</td>
</tr>
<tr>
<td>PTL</td>
<td>1.19–1.38 (1.32±0.015) 10</td>
<td>1.07–1.44 (1.29±0.037) 10</td>
</tr>
<tr>
<td>MSTL</td>
<td>1.19–1.38 (1.30±0.017) 10</td>
<td>1.13–1.57 (1.33±0.042) 10</td>
</tr>
<tr>
<td>MTTL</td>
<td>1.51–1.69 (1.65±0.018) 10</td>
<td>1.51–1.88 (1.68±0.042) 10</td>
</tr>
</tbody>
</table>
Distribution. China; Burma; Laos; Viet-Nam; Thailand.

6. *Margarinotus (Paralister) indica*ola (Desbordes, 1919)
   (Fig. 10, 11)

_Hister indica*ola* Desbordes, 1919b: 89 [Himalaya].

Fig. 10. *Margarinotus (Paralister) indica*ola (Desbordes). A: Pronotum and left elytron.
B: Meso-, metasternum and 1st abdominal sternum. C: Left protibia, dorsal view.
Fig. 11. *Margarinotus (Paralister) indiicola* (Desbordes). A: Head, frontal view. B: Propygidium and pygidium.

Specimens examined. Pakistan: 1♂, Sonamarg, Ladakh, Kashmir, alt. 2,575 m, 26.vii.1983, A. Abe leg.

Remarks. Desbordes (1919b) noted that this species is similar to *Margarinotus (Paralister) ignobilis* Marseul from Europe. Kryzhanovskij and Reichardt (1976) illustrated the median lobe of the male genitalia of *ignobilis*. Judging from their figures, the median lobe of *indiicola* is also similar to that of *ignobilis* except for a slight difference in the shape of median armature.


REFERENCES


* Original not seen.