A REVIEW OF THE SUBGENUS NEOGERRIS
MATSUMURA*
(HEMIPTERA: GERRIDAE)

By HERBERT B. HUNGERFORD and RYUICHI MATSUDA

Through the kindness of Professor Chihisa Watanabe of Hokkaido University, we have been able to examine three specimens (one male and two females) of Neogerris boninensis Matsumura. Each of these bears the label "Neogerris boninensis, 20. VIII, 1905, Ogasawara, Matsumura". They are not labelled as "paratypes". Matsumura (1913), in describing Neogerris boninensis, wrote "Hab.—Ogasawarajima (Bonin Islands); many female specimens collected by the author". We therefore consider them as part of the type series and redescribe them as such. Esaki (1930), whom we assume saw the types, assigned Neogerris Matsumura to the genus Limnogonus Stål without explanation. It does indeed belong to the genus Limnogonus but to the subgenus Limnogonellus Hungerford and Matsuda, which we proposed, in 1959, for L. parvulus (Stål) and its relatives. Thus Limnogonellus Hungerford and Matsuda becomes a synonym of Neogerris Matsumura. The subgeneric synonymy is as follows:

Subgenus Neogerris Matsumura


This subgenus differs from Limnogonus (s. str.) in having a quadrate, rounded or elongate oval spot on the anterior lobe of the pronotum instead of two parallel, short longitudinal lines. In winged forms the humeri are near the middle of the posterior lobe of the pronotum, and in wingless forms the pronotum may be reduced to the anterior lobe, exposing the mesonotum, or may have a more or less prolonged posterior lobe exposing either most of the mesonotum or only its caudal margin.

Limnogonus (Neogerris) boninensis (Matsumura)


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Size: Apterous male 5.04 mm. long; width across head 1.34 mm.; width across mesoacetabula 1.89 mm. Apterous female 6.09 mm. long; width across head 1.43 mm.; width across mesoacetabula 2.2 mm. Matsumura gives the range of bodylength 5.0–6.5 mm., but probably the smaller ones are males.

Color: Fuscous brown to black, often with a velvety surface; a lunate fulvous spot on the back of head, an elongate median fulvous spot on anterior lobe of pronotum, posterior lobe margined with a fulvous band and sometimes with a narrow median longitudinal line. Mesonotum margined with a brown band and may have a median longitudinal line of lighter brown. Metanotum and abdominal tergites and connexivum black, more or less covered with a velvety brown pile. Sides of thorax, acetabula and abdomen black or dark brown, more or less covered with a silvery pile. Coxae fulvous. Venter yellowish brown to black, covered with a frosty pile. Antennae and legs mostly brown.


* 20 units are equal to 0.42 mm.
Abdominal tergites much broader than long except last (7th tergite), which in male is as long as two preceding tergites together. Connexivum nearly erect in male, overlapping lateral portion of last two or three tergites in female; connexival spine absent in both sexes. Metasternum longer than first two abdominal sternites together in male, while shorter in female.

First genital segment of male, as seen from below, longer than last two abdominal sternites together; last abdominal sternite of male nearly as long as two preceding sternites together. Caudal margin of last ventral abdominal segment of female caudally produced medially; last abdominal sternite of female a little longer than two preceding sternites together (37 : 30).

Relative lengths of leg segments*

<table>
<thead>
<tr>
<th></th>
<th>Femur</th>
<th>Tibia</th>
<th>1st tarsal segment</th>
<th>2nd tarsal segment</th>
<th>Total tarsal segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male:</td>
<td>Front leg</td>
<td>100</td>
<td>93</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Middle leg</td>
<td>215</td>
<td>208</td>
<td>76</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Hind leg</td>
<td>220</td>
<td>118</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Female:</td>
<td>Front leg</td>
<td>119</td>
<td>103</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Middle leg</td>
<td>233</td>
<td>227</td>
<td>95</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Hind leg</td>
<td>235</td>
<td>141</td>
<td>30</td>
<td>19</td>
</tr>
</tbody>
</table>

Types: Many individuals belonging to the type series were collected by the late Professor Shonen Matsumura on Ogasawarajima (Bonin Islands). They are preserved at the Hokkaido University, Sapporo, Japan.

The three old world species belonging to the subgenus Neogerris may be separated by the following key:

1. Anterior lobe of pronotum with an elongate oval, fulvous spot. 
   - Anterior lobe of pronotum with a quadrangular or round fulvous spot. 2.

2. Head black, with a broad brownish yellow, caudal transverse band often V-shaped. Front femur of male rather slender, of uniform diameter. Last ventral abdominal segment of female not laterally compressed distally, caudal margin slightly roundly produced at middle.
   - Head black, yellow only on neck. Front femur of male rather stout and thicker across middle. Last ventral abdominal segment of female laterally compressed distally, its caudal margin produced into a sharp keel in the middle. 

Since we reported Limnogonus (Limnogonellus) parvulus Stål as occurring in Madagascar (1959), we must correct our error. Shortly after we had published the above paper we found that the species from Madagascar has characters by which it is separated from L. (Neogerris) parvulus Stål, and sent a pair of specimens to Dr. R. Poisson who reported the Madagascar species to be Limnogonus severini (Kirkaldy) described from the Lower Congo. Our specimens came from Zanzibar and Madagascar.

* 20 units equal to 0.42 mm.