SOME REMARKS ON CICINDELA SAETIGERA HORN

by

C. DE JONG

In 1936 five specimens of the beautiful beetle *Cicindela saetigera* Horn (fig. 1) were collected by Prof. Dr. L. G. M. Baas Becking and Dr. J. Reuter on their journey in Australia and kindly given to the Rijksmuseum van Natuurlijke Historie at Leiden. As this rather uncommon species was new to the collections of the Museum I studied the literature on the species in more detail, especially after Prof. Baas Becking had told me a few details concerning its life conditions.

Our specimens, all males, were caught at the following dates and localities:

4 specimens, March 27, 1936. Lake Bumbunga, N. from Bay St. Vincent, S. Australia.

1 specimen, April 15, 1936. Lake Crosbie, SW. from Mildura, N.W.-Victoria.

First of all I can state, that in most of the papers dealing with *C. saetigera* Horn there is an indication of the locality: Yorke's Peninsula, but no further details about the exact locality are communicated, except by Sloane (1906, p. 343): "Wallaroo, on the shores of Spencer's Gulf".

Concerning the above-mentioned localities of our specimens Prof. Baas Becking told me that he had found these beetles only on the salt-lakes, where they were running and jumping on the bright white saltcrust which covers the greater part of those lakes. They prey on ants there, which live on and under the saltcrust; a rather strange habitat for insects.

After Prof. Baas Becking, who investigated these saltlakes thoroughly, the beetles form an interesting link in the local food-cycle therein, which begins with the bacterial life beneath the salt-crust and ends with some lizards and birds of which no animal enemies seem to exist. More details on this question will be published in Prof. Becking's book on salt and salt-organisms.

Considering the localities (fig. 2) where *C. saetigera* Horn has been

caught till now I am inclined to believe that in time to come it will be found in a far more extended area of Australia and especially on the salt-lakes.

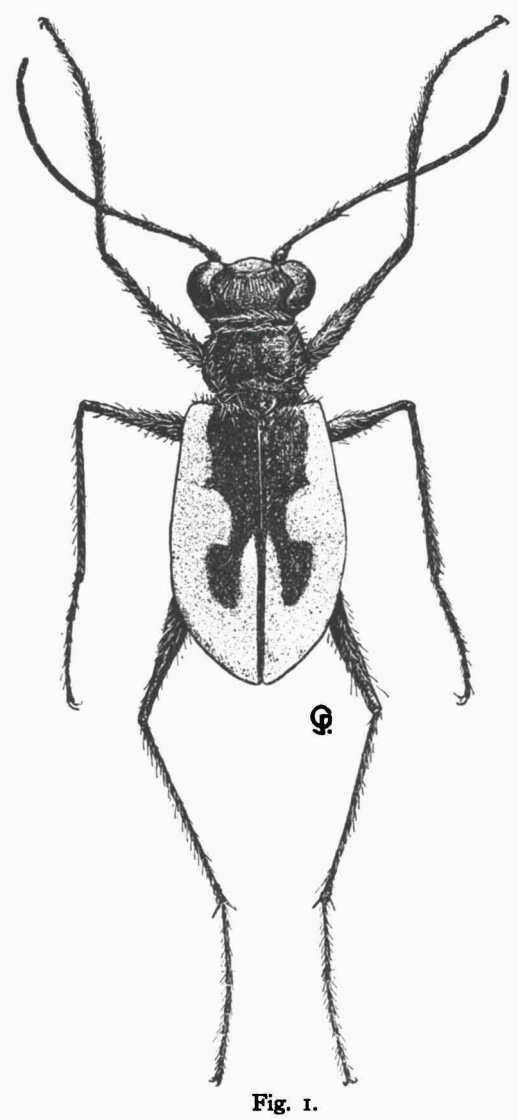

Fig. 1.

Horn (1893) described *C. saetigera* after a rather demolished specimen, and published a figure of it in 1894 (Deutsche Entom. Zeitschr., Jahrg. 1894, Pl. III). I may quote here his latin diagnosis followed by some points from his more elaborate german text (l.c., p. 198/199) which have been discussed by later authors.

"*C. saetigera: Laete rubra; primo antennarum articulo, clypeo, malis, fronte anteriori, thoracis disco lateribusque, elytris hinc inde, inferioribus corporis lateribus, pro- et mesosterni disco hirsutis; elytris latissime flavomarginatis.* — Long. 13 mill.

Cap York; das einzige ♀ verdanke ich der Freundlichkeit des Hrn. Srnka.

Die Art ist mit keiner mir bekannten *Cicindela* näher verwandt und bis jetzt die einzige Species des australischen Gebietes, welche behaarte oder richtiger borstentragende Fld. besitzt. Als ich das arg zerbrochene Ex. das erste Mal sah, fanden sich hier und da — wenn ich mich recht erinnere, besonders in einer der Naht parallelen Reihe — ziemlich lange, dicke, weisse Borsten; jetzt sind derartige in grösserer Anzahl nur noch an der Basis vorhanden, vereinzelte stehen noch in der Nähe des Randes."...

— "Fld.-Spitzen einzeln abgerundet, Nahtdorn weit zurückstehend." — — "Der weisse Fld.-Rand ist sehr breit, nimmt hinten das ganze letzte Drittel der Fld. ein und steigt ausserdem noch längs der Naht ein gut Stück wieder nach aufwärts empor: unterhalb der Schulter findet sich ein minimaler, in der Mitte dagegen ein sehr beträchtlicher, einwärts gerichteter Vorsprung."

In 1901 Blackburn described the same species rather extensively as *Cicindela Jungi*. He mentions that the emargination of the hind-margin

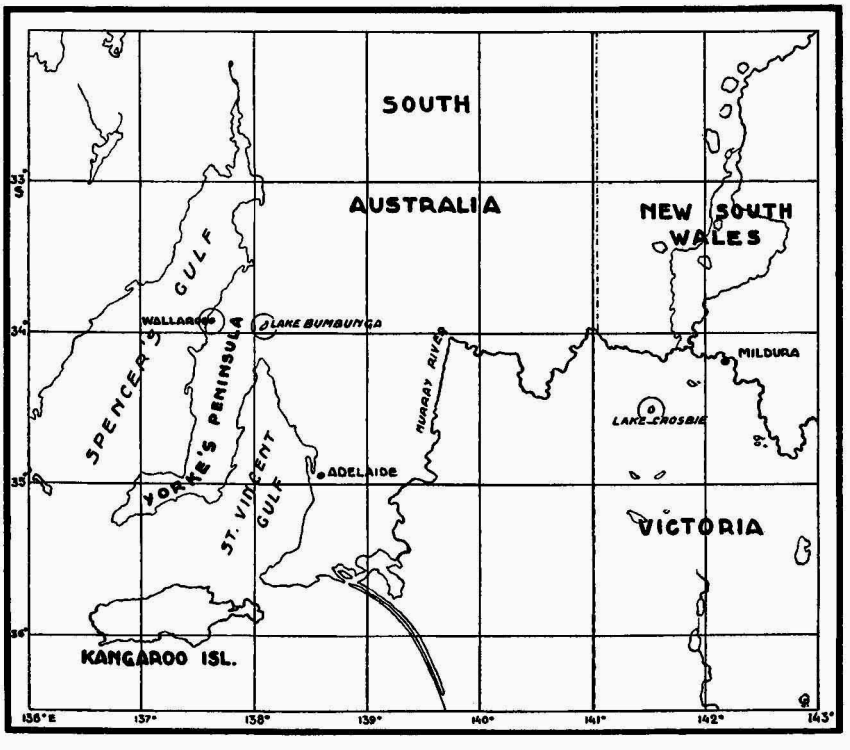

Fig. 2.

of the common coloured blotch, which forms the only marking of the elytra, may vary from a slight inward-bent curve to a long cleft reaching rather far towards the frontmargin.

From his clear description I quote the following (l.c., p. 16): „The female examples before me have the apex of the suture distinctly spiniform,

but in the unique male there is no trace of a spine; perhaps this is an abnormal specimen."

Concerning this point I can state that the five ♂♂ which I examined show no trace of a spine. Combining these facts I presume that these spines are found in the ♀♀ only and thus form an easy way to dertermine the sex in this species.

Rainbow (1904, p. 245) called attention to another detail: „ — the lateral elytral margins in the former [Rainbow's specimen from S. Australia] are also coppery, a point not mentioned by Blackburn in respect of his species. Probably his specimens were not so marked."

As this coppery lining of the elytra is very narrow I suppose it has escaped the attention of other authors but is present in all animals.

Studying the surface of the elytra I found a row of little pits running parallel to the suture (fig. 1); this observation convinced me that Horn's original description must be right and that Sloane's arguments to doubt the correctness of this description as to this detail had no strong foundations. Sloane suggested that Horn described (Sloane, p. 344) "some foreign whitish hairs..... which were removed by the subsequent cleaning." but this seems very doubtful as they were standing in a row.

Horn himself wrote to Sloane (Sloane, p. 344): "— the specimen had also *a few* bristles on the other part of the elytra; — I think fresh specimens in good condition will show a few bristles elsewhere and not only on the shoulders."

Unfortunately our specimens too have lost the bristles along the suture, probably in consequence of their shaking one against the other in the bottle during their transport. So the study of freshly captured specimens only can settle this question definitely.

LITERATURE

HORN, W., 1893. Neue Cicindeliden. Deutsche Entom. Zeitschr., Jahrg. 1893.

BLACKBURN, T., 1901. Further Notes on Australian Coleoptera, with Descriptions of New Genera and Species, XXVIII. Trans. Proc. Rep. Roy. Soc. South Austral., vol. 25.

RAINBOW, W. J., 1904. Note on Cicindela Jungi and Descriptions of two new Beetles. Rec. Austral. Mus., vol. 5.

SLOANE, TH. G., 1906. Revision of the Cicindelidae of Australia. Proc. Linn. Soc. N. S. Wales, vol. 31.