A Provisional Check-List of the Acridoidea of Tasmania (Orthoptera)

By

K. H. L. KEY

Division of Entomology, Commonwealth Scientific and Industrial Research
Organization

Acridoidea, or the "short-horned" grasshoppers, were being collected sporadically in Tasmania as early as the first half of the last century, when specimens taken by Schaver at Woolnorth, in the north-western corner of the island, formed the basis for descriptions of five species by Erichson (1842). Sjöstedt (1935) lists 16 nominal species from Tasmania, but four of these should be rejected on various grounds: Tasmaniacris micropteryx Sjöst. and Cedarinia angustipennis Sjöst. are propably both synonyms of Tasmaniacris tasmaniensis (Bol.); Monistria conspersa Stal is probably a mistaken identification of M. flavogranulata Sjöst.; while Phaulacridium manca (Bol.) is probably identical with P. vittatum (Siöst.) which Sjöstedt records under the name Phaulacridium gemini (Sjöst.) Sjöstedt does not list two species of Erichson's whose types he was unable to locate. These are "Acridium ambulans" and "Callintamus baiulus"; neither has been identified in any collection from Tasmania since Schayer. "Acridium ambulans", however, is probably identical with Phaulacridium vittatum. If this can be established by inspection of the type material, ambulans will have priority over all other trivial names for that species. For the present the name vittatum is retained, notwithstanding that it is threatened, not only by ambulans, but also by manca. The description of Calliptamus baiulus can scarcely refer to any member of the Acridoidea known to the author from Tasmania. It may well be a species still awaiting rediscovery.

If the above adjustments are made to Sjöstedt's list, and Erichson's two doubtful species are omitted, we are left with authentic published records of 12 species of Acridoidea from Tasmania. This number has not

been added to since Sjöstedt's 1935 monograph.

The first extensive and systematic collecting of Acridoidea to be undertaken in Tasmania was carried out by an expedition from the Division of Entomology, Commonwealth Scientific and Industrial Research Organization, in January and early February, 1948. This expedition, which was led by the author, covered some 2800 miles and collected in every major

TABLE 1 Annotated List of the Species of Acridoidea known to occur in Tasmania

Species	Known from museum material collected prior to 1948	Recorded in literature	Type material from Tasmania	Distribution restricted to Tasmania	Collected by Key et al., 1948	Collected by Rick, 1948	Collected by Calaby, 1949	Collected by Sharman et al., 1950-51
Tetrigidae								
Tetrix sp. n. Paratettix argillaceus (Erichs.) 1842 Eumastacidae	+++++++++++++++++++++++++++++++++++++++	+	+		+			+ +
Moraba viatica (Erichs.) 1842 Acrididae	+	+	+	. 71				+
Monistria flavogranulata Sjöst. 1921 Psednura pedestris (Erichs.) 1842	++	1 +	· +	+	+ .	+-		
Psednura sp. n. Kosciuskola sp. n. Phaulacridium vittatum (Sjöst.)	+	'		+ ?1	+ ;			+
1920 Phaulacridium nanum Sjöst. 1921	‡	+			+ :	+	+ + +	+
Urnisa rugosa Sauss. 1884 Exarna includens (Walk.) 1870 Brachyexarna lobipennis Sjöst. 1921	+				+	++	-	
Macrotona australis (Walk.) 1870 Peakesia brunnea (White) 1841 Cirphula pyrrhocnemis (Stal) 1861	- -				+ 5 %	44.0	+-:	+
Goniaea australasiae (Leach) 1814 Tasmaniacris tasmaniensis (Bol.)	+	+			Ŧ		+ .	Ī .
1898 Russalpia albertisi (Bol.) 1898 ² Austracris guttulosa (Walk.) 1870	†	‡	‡	+ +	+	, ex-+	+	‡
Gastrimargus musicus (Fabr.) 1775 Oedaleus australis Sauss. 1888 Austroicetes frater (Brancs.) 1897	+	#			+	+	+	+
Austroicetes pusilla (Walk.) 1870 Austroicetes vulgaris (Sjöst.) 1931 3Chortoicetes terminifera (Walk.) 1870	+ +	+			+ :	+	+	+
Cryptobothrus chrysophorus Rehn 1907	1.2				+ .	+	-+	-, -
Sehizobothrus flavovittatus Sjöst. 1921 Genus & sp. n. 1.	++	+		+	+		+	
Genus & sp. n. 2.	+			+	+ %		+	
Totals 29	22	12	6	6, two others	25	11	17	27

¹ Represented on the mainland by a closely similar form from which it may or may not be specifically distinct.
2 Reported only from King Island (personal communication from Dr. J. W. Evans), and possibly not established there.
3 A periodical invader from the mainland; not established in Tasmania.

Names in bold-face are firmly established as a result of revisionary work now in press.

K. H. L. KEY 129

climatic, edaphic, and vegetational zone on the main island. During the same period Mr. E. F. Riek, also of the Division of Entomology, collected grasshoppers, along with other insects, in a few areas. In January and February, 1949, a second C.S.I.R.O. expedition visited Tasmania, and grasshoppers were collected by Mr. J. H. Calaby. As a result of these surveys a number of additional species were recorded, several of them undescribed. At the request of Professor H. N. Barber, of the University of Tasmania, a key to all the species of the family Acrididae then known to occur in Tasmania (which include all but three of the Acridoidea) was prepared by the author and circulated privately to interested persons in that State. Working with this key, Mr. G. B. Sharman and colleagues in the University of Tasmania were able to secure all but one of the listed species during 1950 and 1951, and to add two more new records, one being Erichson's long-lost *Moraba viatica* (Eumastacidae).

An annotated list of the Acridoidea definitely known to occur in Tasmania is presented in Table 1. The taxonomy of the group in Australia as a whole is in an unsatisfactory state, although a comprehensive revision is at present being undertaken by James A. G. Rehn, of Philadelphia. As a consequence, a number of the names here used may need to be changed in the not-too-distant future. Those names that may be regarded as firmly established, as a result of work of Rehn and the author now in press, are rendered in bold-face type. It should be emphasised that, while some of the names are thus in doubt, there is no question about the distinctness of the species listed, nor about their occurrence in Tasmania. Dr. Rehn has kindly agreed to refer to the present paper in his treatment of any species the names of which will be changed, as a result of his work, from those here given. By this means it will be possible for this list to be brought progressively up to date as regards nomenclature, as the successive sections of Rehn's study are published.

It will be seen that the total number of species is 29, of which five are undescribed—two of them belonging to undescribed genera. The Tetrigidae are represented by two species and the Eumastacidae by one, while the remaining twenty-six belong to the Acrididae. The list more than doubles the number of species previously recorded in the literature. However, a number of the new records were already represented in museum collections in 1948; those in the Tasmanian Museum, Hobart, and the Tasmanian Department of Agriculture have been examined by the author. Six of the species are restricted in their distribution to Tasmania. and of these three are undescribed. *Moraba viatica* Erichs. and *Kosciuskola* sp. n. are doubtfully distinct from species occurring on the Australian mainland.

It is unlikely that many species of Acridoidea remain to be recorded from Tasmania. These insects are relatively conspicuous and active, and in suitable habitats quite numerous; the intensive collecting of the last few years should have brought the great majority to light. However, this collecting has been carried out chiefly in the mid-summer months. The two species (*Moraba viatica* and *Urnisa rugosa*) that were missed by the C.S.I.R.O. expeditions and later found by G. B. Sharman and his colleagues appear to be confined to the spring and early summer; any unrecorded species may well have a similar early season.

¹ The credit for the rediscovery of *Moraba viatica* should actually go to Mr. B. A. B. Edwards, at the time attached to the Zoology Department, University of Tasmania, who collected the first specimensince Schaver.

REFERENCES

ERICHSON, W. F., 1842.—Beitrag zur Insectenfauna von Vandiemenland mit besondere Berücksichtigung der geographischen Verbreitung der Insecten. Arch. Naturg. 8, 83-287.

SJÖSTEDT, Y., 1935.—Revision der australischen Acridiodeen. 2. Monographie. K. Svenska VetenskAkna Handl. (3), 15, 1-191, 2 pls.