

## ADDITIONS TO THE KNOWN ORTHOPTEROUS FAUNA OF OHIO.

W. J. KOSTIR.

The first attempt to catalog the known Orthoptera of Ohio was made by Charles S. Mead in 1904. His list was published in the OHIO NATURALIST for March of that year. It was based upon the collection of Orthoptera of the Ohio State University and the results of his own collecting in several parts of the state. The list contained nearly one hundred names. No additions to this list have been published up to the present time.

At intervals during the past three years the writer has collected in various parts of the state, and has also examined all the private and college collections of Orthoptera that were available. The literature has been carefully gone over for possible Ohio records, though little information was obtained in this way. Much help was received through the kind co-operation of numerous friends, and for this the writer wishes here to express his deep obligation. As a result of this work the species and varieties listed below have been added to the known Orthopterous fauna of Ohio. Much has also been learned about the distribution within the state of many of the other forms, and this information the writer hopes to incorporate in a short descriptive catalog of Ohio Orthoptera, upon which he is at present working.

Records of exotic species taken in the state have not been included in this list, except in cases where they seem to have become established.

Acknowledgment should here be made of assistance in identification kindly given by Mr. A. N. Caudell, Prof. A. P. Morse, and Mr. Morgan Hebard. Except where otherwise noted, all identifications have been made or verified by the writer.

### Family FORFICULIDAE.

**Vostox** (Spongiphora) **brunneipennis** Serv.

One ♂, taken by Mr. Charles Dury at Cincinnati.

### Family BLATTIDAE

**Ischnoptera borealis** Brunn.

All but one of the specimens referred by Mead to *I. uhleriana* belong to *I. borealis*. This one exception is the only specimen of *I. uhleriana* from Ohio that the writer has seen. It is a typical ♂, and was taken at Vinton, Vinton County, by Prof. James S. Hine. *I. borealis* has been taken in various parts of the state.

**Ischnoptera coulonia** Sauss.

One ♀, taken by Prof. J. S. Hine at Hanging Rock, Lawrence County.

**Ischnoptera** (Temnopteryx) **deropeltiformis** Brunn.

One ♂, taken by Mr. F. W. Cowles at Sugar Grove, Fairfield County.

**Ischnoptera johnsoni** Rehn. (*I. intricata* Blatch.)

One ♀, taken at Castalia, Erie County, by Miss Blanche Howe.

## Family MANTIDAE.

**(?) Paratenodera** (*Tenodera*) **sinensis** Sauss.

This species was introduced in Cincinnati about 1905 by Miss Annette Braun, the egg-masses having been brought from Philadelphia. Specimens were seen each summer for several years afterward. It has not been seen for the past three summers and may have died out.

**Stagmomantis carolina** Linn.

Numerous specimens of this common southern species have been taken in the southern part of the state. 1 ♀ was taken by Mr. M. M. McLeish, in Franklin County, just east of Columbus.

## Family PHASMIDAE.

**(?) Diapheromera velii** Walsh.

Scudder, in his paper on the genus *Diapheromera* (*Psyche*, vol. IX, (1901), pp. 187-189), records this species as present in Ohio. Until Scudder's material can be examined, however, it would seem to be doubtful whether he did not have at hand specimens of the later-described *Manomera blatchleyi* Caudell, ♀s of which, according to Caudell, are scarcely separable from those of *D. velii*.

**(?) Manomera** (*Bacunculus*) **blatchleyi** Caud.

Numerous specimens, all ♀s, agreeing with the descriptions of the ♀ of both *Manomera blatchleyi* and *Diapheromera velii*, have been taken by the writer at Cedar Point in the past three summers. Since no ♂s were taken, certain identification is hardly possible, but as *D. velii* is a species of distinctly southern range, it is very probable that they belong to *M. blatchleyi*.

## Family GRYLLIDAE.

**Ellipes minutus** Scudd.

The specimens referred by Mead to *Tridactylus apicalis* Say belong to this species. They were collected in Columbus. The writer has also taken this species at Cedar Point, Erie County, and at Sugar Grove, Fairfield County.

**Myrmecophila pergandei** Brun.

This interesting myrmecophilous species was taken by Mr. Dury in thick woodland, near Cincinnati. It was found in ant-nests which had been exposed by overturning logs and stones.

**Nemobius bruneri** Heb.

Several specimens, ♂ and ♀, taken by the writer among the pebbles and stones along the Olentangy River, Columbus. (Id. M. Hebard).

**Gryllus pennsylvanicus arenaceus** Blatch.

One ♀, collected by Mr. Mead at Cedar Point.

**Gryllus pennsylvanicus firmus** Scudd.

Four specimens, collected by the writer: One ♂, two ♀s, at Ironton, Lawrence County, and one ♀, at Sugar Grove.

**Gryllus pennsylvanicus integer** Scudd.

Two ♀s, taken by the writer at Cedar Point. (Id. A. N. Caudell).

**Oecanthus exclamationis** Dav.

A number of specimens have been taken by the writer at Cedar Point.

**Hapithus** (Apithes) **agitator** Uhl.

One ♂, taken by Prof. Herbert Osborn at Rupels Station, Ross County.

**Orocharis saltator** Uhl.

Taken by Prof. Osborn at Rupels Station, Ross County, and by Mr. Dury, at Cincinnati.

## Family TETTIGONIIDAE (LOCUSTIDAE).

**Amblycorypha uhleri** Stal.

One ♂, taken by the writer at Hanging Rock, Lawrence. Co.

**Neoconocephalus** (Conocephalus) **triops** Linn.

One ♂, taken at Etna Junction, Lawrence County.

**Orchelimum agile** DeG.

Two ♂s, taken by the writer at Hanging Rock, Lawrence County. (Id. A. N. Caudell).

**Orchelimum glaberrimum** Burm.

Specimens taken by Mr. Dury at Cincinnati and by the writer at Cedar Point and Columbus.

**Orchelimum gladiator** Brun.

One ♀, taken by the writer at Cedar Point.

**Camptonotus carolinensis** Gerst.

One ♀, taken by Prof. Osborn at Rupels Station, Ross County.

**Diestrammena marmorata** Haan.

This interesting Ceuthophilus-like form was introduced into this country some years ago from Japan. Specimens have been taken in an empty dwelling at Clintonville, Franklin County and in a greenhouse at Springfield. In the latter place, at least, it seems to have established itself permanently.

**Ceuthophilus ensifer** Pack.

Two specimens are in the Ohio State University collection, one ♂ from Sugar Grove and one ♀ from Columbus.

**Ceuthophilus gracilipes** Hald.

One ♂, taken by Mr. Dury at Cincinnati, and one ♀, taken by Dr. Morrey at Chester Hill, Morgan County. (Id. A. N. Caudell).

**Ceuthophilus heros** Scudd.

One ♂, taken by Mr. C. J. Drake, at Tiffin, Seneca County, and several specimens, ♂s and ♀s, collected by the writer near Clyde, Sandusky County and at Rocky River, Cuyahoga County. (Id. A. N. Caudell).

**Ceuthophilus neglectus** Scudd.

Several specimens, ♂s and ♀s, taken by Mr. R. J. Sim, at Jefferson, Ashtabula County.

**Ceuthophilus pallidipes** Walk.

Two ♂s, one ♀, taken by Mr. R. J. Sim, at Jefferson.

**Ceuthophilus tenebrarum** Scudd.

In his paper on the North American Ceuthophili, (Proc. American Academy, vol. XXX (N. S. XXII) (1894), p. 72), Scudder says of this species: "Two ♂, two ♀, from Ohio are in the collection of Riley. (U. S. Nat. Mus.)."

## Family ACRIDIIDAE.

**Neotettix femoratus** Scudd.

One specimen of this southern species, a ♂, was taken by the writer near S. Bloomingville, Hocking County.

**Acrydium** (*Tettix*) **hancocki** Morse.

One ♂, taken by the writer at Ironton.

**Tettigidea lateralis** Say.

One ♂ and two ♀s of this southern form were taken by the writer at Ironton. A few fairly typical specimens from Hanging Rock, Sugar Grove and Columbus are in the University collection. A number of specimens taken in the southern half of the state are plainly more or less intermediate between *T. lateralis* and *T. parvipennis*, through a perfect connecting series between the two is lacking.

**Trachyrhachis thomasi** Caud. (*Mestobregma cincta* auct.)

Several specimens, ♂s and ♀s, have been taken by the writer at Ironton, and near S. Bloomingville, Hocking County. One ♀ was picked up on the University campus, Columbus.

**Trimerotropis citrina** Scudd.

Taken by Mr. Dury on sand bars along the Ohio River at Cincinnati, where it is common.

**Schistocerca alutacea rubiginosa** Harr.

One specimen, taken at Athens, Athens County. In the Ohio State University Collection.

**Schistocerca damnifica** Sauss.

Taken by Mr. Dury at Cincinnati and by the writer at Sugar Grove.

**Melanoplus minor** Scudd.

One ♂, two ♀s, taken by the writer near Newark, Licking County.

**Melanoplus morsei** Blatch.

Two ♀s, taken by Mr. B. B. Fulton and the writer near S. Bloomingville, Hocking County.

**Melanoplus obovatipennis** Blatch.

Numerous specimens, ♂s and ♀s, have been taken by the writer at Hanging Rock, Lawrence County, at Cincinnati, at Sugar Grove, and near S. Bloomingville, Hocking County.

**Melanoplus punctulatus** Scudd.

Two specimens of this arboreal grasshopper have been taken at Cedar Point in different years, by Miss E. D. Faville and Mr. J. L. King.

**Melanoplus similis** Morse.

One ♂, one ♀, taken at Vinton, Vinton County. In the Ohio State University collection. (Id. A. P. Morse).

---