

A NEW SPECIES AND RECORDS OF PAMPHAGINAE FROM NORTH AFRICA AND SPAIN.

(ORTHOPTERA: ACRIDIDAE)

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Dr. Edwin R. Helwig and the late Dr. Phillip B. A. Powers, both of the University of Pennsylvania Zoology Laboratory, secured an interesting collection of Orthoptera from North Africa and southern Spain during the summer of 1932. The objective of the trip was to obtain gonad material for cytological studies. The specimens from which these gonads were taken have been very kindly deposited in the Orthoptera collections of the Academy of Natural Sciences of Philadelphia. Upon determining the pamphagids it was found that one species of the genus *Acinipe* was new to science and is described below. In addition to this the other records of this subfamily are included.

Euryparyphes bolivarii (Stål)

Algeciras, Spain; VI, 29, 1932; 1 ♂, 1 ♀.

Euryparyphes flexuosus Uvarov

Azrou, Morocco, (in valley south of town); 2000 m.; VII, 11, 1932; 14 ♂, 4 ♀.

This species was described from a pair taken at this locality.

Acinipe hesperica Rambur

Guercif, Morocco, (near border of Algeria); VII, 12, 1932; 1 ♂.

Acinipe expansa (Brunner)

Algeciras, Spain; VI, 29, 1932; 18 ♂, 3 ♀. Tangier, Morocco; VII, 5, 1932; 1 ♂.

***Acinipe algerica* (Brunner)**

Saida, Algeria; VII, 18, 1932; 2 ♂.

***Acinipe strigata*¹ new species**

This genus contains some twenty species and there being no recent comprehensive treatment of the group, it is rather difficult to make out their proper association. In all probability a number of the species will prove to be little more than geographic races or subspecies of each other. This new species is most closely related to *Acinipe expansa* (Brunner) and *Acinipe algerica* (Brunner) in that the ventral margin of the ultimate sternite in lateral aspect extends almost straight to an acute apex and the surface of the pronotum and the abdomen is relatively smooth; where as the association including *A. dolichocera* (Bolivar), *A. inflata* Werner, etc. has the ventral margin of the ultimate sternite in lateral aspect strongly upturned towards its apex to form an approximate right angle with the dorsal margin at the apex; and where as the *A. hesperica* Rambur and *A. crassicornis* (Bolivar) association has the pronotum and the dorsum of the abdomen very roughened or rugose. This new species differs, however, from *A. expansa* and *A. algerica* in lacking any tooth-like projection close to the caudal margin of the abdominal tergites on the mid-dorsal carina.

Type.— ♂ ; Azrou (in valley south of town), Morocco. Elevation 2000 m. July 11, 1932. (E. R. Helwig and P. B. A. Powers). [Academy of Natural Sciences of Philadelphia, Type no. 5568].

Closely similar in size and structural details to *A. expansa*. It differs in that the pronotal crest or carina is lower and less arcuate in lateral aspect; also it is less deeply cut by the transverse sulcus. As mentioned above, the mid-dorsal ridge of the abdomen lacks any sharp tooth-like projection near the caudal margin of several of the anterior abdominal tergites.

Head relatively smooth. Apex of fastigium deeply cleft; lateral carinae diverge straight from apex to near lateral ocelli and from thence extend parallel, caudad, between the eyes. No pronounced median carina on dorsum of head. Frontal costa narrow, strongly sulcate; lateral carinae of same diverge slightly from apex of fastigium ventrad; slightly con-

¹ An allusion to the series of small, black stripes on the pronotum.

stricted just below the median ocellus. Lateral facial carinae pronounced and straight. Antennae relatively long cylindrical. Pronotal crest moderately arcuate with slight emargination where it is cut by principal sulcus; not longitudinally sulcate. No defined lateral margins or lateral carinae on disk of pronotum; caudal margin slightly and very broadly obtuse angulate emarginate with median point narrowly rectangulate emarginate. Prosternal spine formed by the strong production ventrad of the median portion of the anterior margin of the prosternite; apex bluntly though narrowly rounded with a slight median impression or emargination suggested.² Tegminal pads long narrow and apically rounded extending to caudal margin of first abdominal tergite. Metanotum and anterior three or four abdominal tergites slightly carinate on their dorso-median line, and lack any tooth-like projections. Mid-ventral line of ultimate sternite in lateral aspect extends straight to apex.

Paratypes.—In addition to the type we have four males with similar data and also six males from Fedhala near Casa Blanca, Morocco, taken July 8, 1932. All of these are considered paratypes. Unfortunately we have no females.

Coloration.—General tone straw color. Ventral longitudinal stripe on lateral lobes of pronotum chalky white. Posterior and anterior margins of pronotum have a series of black longitudinal stripes extending in from the margins a short distance. Lateral portion of caudal margin of abdominal tergites with three black spots on either side. About seven small black spots on dorsal margin of external pagina of hind femora. Tegminal pads with dorsal half pale straw color; ventral half fuscous brown. Inner and ventral face of hind tibiae on their proximal two thirds bluish black; distal third red. One of the specimens from Azrou lacks much of the distinctive coloration which is so pronounced in the rest of the series from both localities.

Measurements.—Type: length of body (abdomen somewhat upturned caudad) 31; length of antennae 15; length of pronotum 7; length of hind femora 17; length of tegminal pads 6.5 mm. There appears to be little variation in size in the whole series.

***Pamphagus elephas* (Linnaeus)**

Algiers, Algeria; VII, 21, 1932; 26 ♂, 2 ♀. Baba Ali, near Algiers, Algeria; VII, 23, 1932; 1 ♂.

² This is much more pronounced among many of the paratypes so that it there results in two apical processes.