

occurring in the U. S. Nat. Museum. It first came to my notice in the State on August 8, 1897, when it was found near DeLong, Fulton County, in an open peat bog which was surrounded on all sides by a heavy growth of tamarack, *Larix americana* Michx. But about a dozen specimens were secured, all of which were of the short-winged form, *M. e. junius*, the measurements of male being: length of body, 18 mm.; of tegmina, 11 mm.; of hind femora, 11.5 mm.

When disturbed they gave several short, quick leaps, and then burrowed as far as they could into the dense mass of sphagnum moss which everywhere covered the bog.

5. *MELANOPLUS ANGUSTIPENNIS* (Dodge.) The Narrow-winged Grasshopper.

Caloptenus angustipennis Dodge, Can. Ent., IX., 1877, 111.

Thos., Rep. U. S. Ent. Comm., I., 1878,
43.

Melanoplus angustipennis Bruner, Bull. Wash. Coll. Lab. Nat. Hist.,
I., 1885, 138.

Id., Bull. 28, U. S. Div. Ent., 1893, 24,
fig. 12.

Scudd., Proc. U. S. Nat. Mus., XX., 1897,
305, Pl. XX., fig. 6.

This is a western species which has not heretofore been recorded east of Kansas and Iowa. According to Bruner, it ranges from North Dakota to Texas, and west to Yellowstone, Montana. He also states that it is increasing rapidly in numbers, and is likely in places to become a serious pest.

It is one of the most common grasshoppers about the south shore of Lake Michigan, occurring in company with *M. atlantis* (Riley), *Spharagemon wyomingensis* (Thos.), and others over a large part of the sandy area within five miles of the lake. It seems to prefer such barren localities to those more promising in plant food, since Bruner mentions its partiality for "old breakings and well-fed pastures of many years' use."

To a cursory observer *angustipennis* bears a general resemblance to *atlantis* (Riley), but may be readily distinguished by its blue tibiae, the lack of a notch at the apex of the last abdominal segment of the male, and the different shape of the male cerci. The dark spots along the middle line of the tegmina of the Indiana specimens are larger and more numerous than one would expect to find after reading the descriptions of Dodge