Midsouth Entomologist **6**: 115-118
ISSN: 1936-6019
www.midsouthentomologist.org.msstate.edu

Report

Noteworthy Collections of Grasshoppers (Orthoptera: Acrididae) From Five Southeastern States.

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Abstract: Noteworthy collections for nine grasshopper species from Alabama, Arkansas, Florida, Georgia, and Mississippi are presented along with a statement of their significance.

Key Words: Acrididae, Boopedon, Eotettix, Dendrotettix, Melanoplus, Spharagemon

Received: 10-X-2013 Accepted: 16-XII-2013

Introduction

In a preliminary list of the grasshoppers of the southeastern United States, Hill and Dakin (2011) reported 160 grasshopper species group names and the states in which they occur in. Since then Otte (2012) and Hill (In press) have described seven and two new species of *Melanoplus* from the region respectively. As part of an ongoing survey of the grasshopper fauna of the southeastern United States, increasingly refined species distribution information is being compiled. In the process, noteworthy collections have been made representing the first documentation of nine species for the first time from five states. These new state records are reported below. An up to date listing for each southeastern state can be found at the Grasshoppers of the Southeastern U.S.A webpage: http://mississippientomologicalmuseum.org.msstate.edu/Researchtaxapages/Orthoptera/Acrididaepages/Acridid.intro.htm.

Results and Discussion

Alabama

Melanoplus davisi Hebard**:** Covington Co., 4 mi NNW Red Level, 31º27'44"N 86º38'52"W, 12 September 2013, J.G. Hill, sandhill, (1♂).

Melanoplus pygmaeus Davis: Baldwin Co., Bon Secour National Wildlife Refuge, 29 October 2009, J.G. Hill & D. Otte, oak-pine scrub (3 ♂, 2 ♀); Gulf State Park, 30º13'12"N 87º39'51"W, 4 October 2013, J.G. Hill, sandhill (1 ♂, 1 ♀); 30º16'17"N 87º39'17"W, edge of maritime forest (3 ♂, 2 ♀).

Melanoplus symmetricus Morse: Covington Co., Florala, 31º03'18"N 88º18'32"W, 4 October 2012, J.G. Hill, early successional pine forest (1 ♂).

Significance: The three *Melanoplus* species reported above were previously considered endemic to the panhandle of Florida (Capinera et al 2001). Covington and Baldwin Counties lie adjacent to the panhandle, thus these records are not surprising, but are noteworthy in that they are first reports of these species from outside of Florida, and the first records for Alabama.

Spharagemon saxatile Morse: Lawrence Co., Prairie Grove Glades Nature Preserve, 34º31'04"N 87º30'14"W, 22 August 2007, J.G. Hill, xeric limestone prairie (3 ♂, 5 ♀).

Significance: Otte (1984) describes the distribution of *S. saxatile* as "Appalachian Mountains from eastern Tennessee and southern Ohio to Massachusetts", and Hill (2012) reported the species from cedar glades in the Central Basin of Tennessee. The record of *S. saxatile* reported here is significant in that is the southern most record of the species thus far, and is the first report of the species from Alabama.

Arkansas

Boopedon gracile Rehn: Johnson Co., Ozark National Forest, 35º35'11"N 93º15'01"W, 16 September 2011, J.G. Hill, roadside clear-cut (1 ♂).

Significance: *Boopedon gracile* is distributed from northeastern Mexico through central Texas to Oklahoma and Kansas (Otte 1981). The report of *B. gracile* from Johnson Co. Arkansas represents the eastern most record of the species as well as the first report of the species from Arkansas. This is also a new addition to the southeastern species list produced by Hill and Dakin (2011).

Florida

Melanoplus decoratus Morse**:** Leon Co., Tall Timbers Research Station, 30º38'56"N 84º14'40"W, 19 June 2011, J.G. Hill, oak hammock (1 ♀).

Significance: This is the first report of this species from Florida. Typically, with *Melanoplus* definitive species determination is made with males; however, this record is based on a female specimen. A series of this species, including males, has been collected near the state line in adjacent Georgia and the females from that series compare favorably with this specimen.

Georgia

Eotettix palustris Morse**:** Thomas Co., Wade Tract, 30º45'35"N 84º00'01"W, 4 August 2011, J.G. Hill, old growth longleaf savannah, W.H. Cross Expedition (1 ♂, 1 ♀).

Significance: *Eotettix palustris* was previously considered endemic to Florida (Capinera et al. 2001). Though this collection is not surprising as it was made relatively close to the Florida state line, it is noteworthy as it is the current northernmost record for the species as well as the first record of the species in Georgia.

Dendrotettix australis Morse**:** Rabun Co., Warwoman WMA, 34.92512N 83.26637 W, 1 August 2012, G. Beaton, along old logging road (1 ♂).

Significance: *Dendrotettix australis* was previously known from northeastern Alabama, eastern Tennessee and western North Carolina (Friauf 1957). The record reported above is the first record for the genus as well as the species in Georgia.

Mississippi

Encoptolophus subgracilis Caudell**:** Lowndes Co. Black Prairie WMA, 33º21'39"N 88º32'06"W, 7 August 2009, J.G. Hill, soybean field (4 ♂, 1 ♀). Monroe Co., 1.7 mi W of Gibson, 33º50'26"N 88º42'48"W, 1 September 2009, J.G. Hill, edge of soybean field (1 ♂). Oktibbeha Co., Mississippi State North

Experiment Farm, 33º28'39"N 88º47'14"W, 4 September 2009, J.G. Hill, soybean field (14 ♂, 4 ♀); edge of corn field (8 ♂, 3♀).

Significance: The above records of *E. subgracilis* are the first of the species east of the Mississippi River, Thus far, in Mississippi, this species has been found only on the cultivated margins of row crop fields in the Black Belt Prairie region of the state. Numerous surveys in natural habitats in the Black Belt have not detected the species.

Acknowledgments

I thank Richard Brown for comments on an early draft of the manuscript, Jim Cox, Jackie Isaacs, Chris Oberholster, Kelly Reetz, and James Whalen, for allowing collections to be made on properties they oversee. Additionally, I thank Giff Beaton for providing the specimen of *D. australis*. These collections were made as part three independent projects, which were funded by the William H. Cross Collecting Expedition endowed fund, the Georgia Department of Natural Resources Nongame Conservation Section, and The Orthopterists' Society respectively. This article is approved for publication as Journal Article No. J-12473 of the Mississippi Agricultural and Forestry Experiment Station. This research was supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture. This research was also supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under Project No. MIS-012040.

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