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The Genus *Reuteria* (Hemiptera: Miridae) with Five Species New for Arkansas, U.S.A.

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Over the past half decade, over 80 true bug (Hemiptera: Heteroptera) species have been published as new records for Arkansas (Chordas et al. 2012). During 2009 & 2010, a light trapping project was conducted in the Ross Foundation Demonstration Area Forest (Clark County, Arkansas). From this project we collected many species unreported in the literature for Arkansas; five species of one genus are included here.

Collection locality for all species reported herein is as follows (= minute white dot on maps): **Arkansas, Clark County** : ~25km south west of Arkadelphia, Arkansas; forest (Ross Foundation Demonstration Area) off south side of I-30 : UV light trap [N33.937 : W-93.237], K. Benjamin collector. Dates of collection and numbers of specimens encountered are listed with each species.

We newly report *Reuteria* Puton, 1875 consisting of the following five species as new for Arkansas: *Reuteria bifurcata* Knight, 1939; *Reuteria dobsoni* Henry, 1976; *Reuteria fuscicornis* Knight, 1939; *Reuteria querci* Knight, 1939; *Reuteria wheeleri* Henry, 1976. Additionally, we provide updated distribution maps (north of Mexico) for each species. Vouchers of all five species were deposited into the C.A. Triplehorn Insect Collection (The Ohio State University, Columbus Ohio). Some duplicates were retained by the first author (SWC). Vouchers of both *R. dobsoni* and *R. wheeleri* were deposited in the U.S. National Museum (USNM), Washington D.C. and the University of Arkansas Arthropod Museum Fayetteville, AR (an inquiry to the University of Arkansas indicated they had no *Reuteria* identified to species in their holdings). Henry (1976), Henry and Wheeler (1988), Henry et al. (2005) and Maw et al. (2000) were used as distributional references. Henry (1976) and Blinn (1988) were used for species identifications.

New Records:

Reuteria bifurcata is now known from nine states and one province in Canada. It is not surprising to find *R. bifurcata* in Arkansas as it has been reported from both Oklahoma and Missouri (Figure 1). Five specimens were obtained in three different light traps

on 17-VI-2009, 13 specimens were obtained in three different light traps on 11-VI-2010, and two specimens were captured in a single light trap on 27-VI-2010.

Reuteria dobsoni was unexpected for Arkansas as it was previously known only from the Pennsylvania specimens used in the original description. The Arkansas specimens represent a significant western range extension of 1,400+ km for this species (Figure 2). No records of this species have been reported in the literature since the original description. Further, Thomas Henry confirmed that he has not taken this species since then (Thomas Henry; USNM: Smithsonian; Washington DC, *pers. comm.* January 2013). A dorsal habitus photo and a lateral view of the fuscous marks on antennal segments 1 and 2, typical of most *Reuteria* species, is provided (Figure 3).

Twenty-seven specimens of *R. dobsoni* were obtained in five different light traps on 17-VI-2009, five were captured in two different light traps on 11-VI-2010, and two were obtained in a single light trap on 27-VI-2010. Given the number of specimens of this rare species we encountered (34 total), we hypothesize that other populations occur in Arkansas.



Figure 1. Distribution of *Reuteria bifurcata* north of Mexico.



Figure 2. Distribution of *Reuteria dobsoni* north of Mexico.

Reuteria fuscicornis is a distinctive species with antennal segment two mostly fuscous, significantly more so than any other *Reuteria* species. We found a single male taken on 11-VI-2010. The Arkansas record represents a southern range extension to below the 34th parallel for this species (Figure 4).



Figure 3. Dorsal view & lateral antenna view of *Reuteria dobsoni*



Figure 4. Distribution of *Reuteria fuscicornis* north of Mexico.

Reuteria querci is known from the midwestern and eastern half of the United States and Canada (Figure 5). The Arkansas records represent one of the more southerly portions of the species' range. It was probable for the state, as it was previously reported for Missouri and is known as far south as Georgia (Figure 5). Twenty-five specimens were obtained in six different light traps on 17-VI-2009, one collected on 27-VI-2010 and 12 from four traps on 11-VI-2010.

Reuteria wheeleri is an uncommon species that was previously reported from three states (Kentucky, North Carolina, Georgia) east of the Mississippi River (Figure 6). The Arkansas records extend the range to west of the Mississippi River. We encountered eight specimens; three specimens from three different light traps on 17-VI-2009, two specimens from a single light trap on 11-VI-2010 and three specimens from three different light traps on 21-V-2013.



Figure 5. Distribution of *Reuteria querci* north of Mexico.



Figure 6. Distribution of *Reuteria wheeleri* north of Mexico.

We encountered the vast majority of our specimens in June (97%) with most of the individuals being males (86%). Four of the five *Reuteria* occur on oaks (*Quercus* sp.). Henry (1976) noted *R. dobsoni* from two oak species (swamp white oak, *Quercus bicolor* Willd [not found in Arkansas] and pin oak *Quercus palustris* Münchh). All others (except *R. fuscicornis*; from hornbeam) occur on post oak (*Quercus stellata*

Wangenh) (Henry et al. 2005). *Quercus* species dominated the forest where we obtained these mirids.

Of the nine known species of *Reuteria* occurring in North America, north of Mexico, we report five for the first time for Arkansas. Three other *Reuteria* species may occur in Arkansas: *R. craigi* Blinn, 1988 (known only from Missouri); *R. irrorata* (Say, 1832) (a fairly common and widely distributed species with records just north of Arkansas from Kentucky, Kansas, Missouri); *R. pollicaris* Knight, 1939 (currently known only from the type specimens from Mississippi). The other species of the genus (*R. platani* Knight, 1941) is known from locations north of Arkansas with records from Kentucky, Illinois and Pennsylvania. However, as we found *R. dobsoni*, it is likely that other species of *Reuteria* occur in Arkansas.

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