

## Two Previously Undescribed Species of Miridae in North America (Hemiptera: Heteroptera)<sup>1</sup>

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### ABSTRACT

*Deraeocoris madisonensis* (Deraeocorinae) and *Lopidea medleri* (Orthotylinae) are described from Wisconsin

and the male genital claspers are figured. Relationships to previously described species are discussed.

Study of the Miridae in Wisconsin revealed the occurrence of 2 previously undescribed species. One, *Deraeocoris madisonensis*, n.sp., apparently had not been collected before the summer of 1971; the other, *Lopidea medleri*, n.sp., has long been in the collection of Dr. J. T. Medler of the University of Wisconsin. The types have been deposited in the University of Wisconsin Entomology Insectarium.

### *Deraeocoris madisonensis*, n. sp.

(Fig. 1-3)

**HOLOTYPE.**—♂, collected on white cedar, *Thuja occidentalis* L. and bearing the following data labels: Dane Co., Wis., Olbrich Park, Madison. 6-28-71, Akin. A. E. Length: 5.40 mm; width: 2.70 mm.

**Head.**—Width across the eyes, 1.05 mm; vertex, 0.53 mm; carina present; collum exposed, black and shiny; frons smooth, yellowish to fuscous with 2 broad arclike areas surrounding a median paler band, and 2 black crescentic bands near eyes extending up to vertex and down to antennophore; tylus with one black stripe on either side of the middle. **Antennal Segments.** I, 0.40 mm, fuscous; II, 1.35 mm, fuscous; III, 0.58 mm, dark brown; IV, 0.49 mm, dark brown; all segments bearing erect golden pubescence; Segment II with length of exerted hairs greater than thickness of segment, the latter increasing gradually in thickness to apex. **Pronotum.** Width at base, 2.30 mm; disk convex and distinctly covered by black punctures; posterior margin sinuate; a roughly T-shaped ivory white clearing on the disk cutting off the solid black calli anteriorly and 2 large black blotches laterally. **Mesoscutum** mostly black, whitish at lateral margins. **Scutellum** tumidly convex, whitish with slight infuscation but with 2 distinct large black stripes on the disk. **Cuneus** with basal half white and apical half black. Membrane moderately deflexed, dusky except for 2 clear areas, each one immediately behind the cuneus. **Tibiae** pale yellow with 3 fuscous to dark brown annuli. **Dorsum** shiny black, variously permeated by ivory white, leaving distinct black punctures; practically glabrous with scattered short erect golden pubescence, especially on lateral margins of pronotum and on the mesoscutum. **Venter** reddish, distinctly covered with erect golden pubescence. **Genital Claspers** as in Fig. 1-3.

**Allotype.**—♀, same data as holotype. Length: 5.00 mm; width: 2.70 mm.

**Head.**—Width across eyes, 1.10 mm; vertex 0.58 mm. **Antennal Segments.** I, 0.40 mm; II, 1.40 mm, III, 0.55 mm, IV, 0.45 mm; all segments similar in coloration and pubescence to male, Segment II with the slightly swollen apical  $\frac{1}{2}$  darker and more clearly defined. **Pronotum.** Width at base, 2.20 mm; posterior margin sinuate. General coloration and pubescence similar to the male but slightly more infuscated and darker especially on the frons.

**Paratypes.**—4 ♂, 8 ♀ taken on red cedar, *Juniperus virginiana* L. at the Picnic Point, University of Wisconsin, Madison campus, 7-12-71, Akin. A. E.

**Comments.**—This species shows some variation in dimensions, especially in the female. The length of females examined ranged from 5.00 to 5.50 mm while the width ranged between 2.70 and 2.90 mm; the width of pronotum at base was 2.30-2.50 mm. The males examined showed a more constant length and width but the width of the pronotum at base ranged between 2.10 and 2.30 mm. The species runs to *D. manitou* Van Duzee in Knight's 1921 key but can readily be separated from it by the structure of the male right genital clasper (Fig. 4). In Knight's 1941 key, it runs to *D. pinicola* Knight but differs from it in the structure of the genital claspers (Fig. 5), the fuscous to dark brown triannulation of the tibiae, and the longer exerted hairs on the 2nd antennal segment.

### *Lopidea medleri*, n. sp.

(Fig. 6-12)

**HOLOTYPE.**—♂, bearing the following data labels: Eau Claire Co., Fairchild, Wis., 7-15-63, J. T. Medler. Length: 5.30 mm; width: 2.00 mm.

**Head.**—Width across eyes, 1.08 mm; general color red, 2 broad, darkened arclike areas surrounding a median red band on frons, these darkened areas bearing numerous oblique striations; tylus darkened; vertex, 0.63 mm; rostrum, 1.85 mm, extending slightly beyond hind coxae. **Antennal Segments.** I, 0.50 mm; II, 1.80 mm; III, 1.40 mm; IV, 0.50 mm; all segments dark red and bearing erect dark bristlelike hairs; Segments I and II thickened, with II more or less spindle shaped. **Pronotum.** Width at base, 1.63 mm; posterior margin sinuate, lateral margin carinate; calli red but invaded with numerous black shiny dots. **Dorsum** generally red. **Scutellum** and narrow area around claval suture with some darken-

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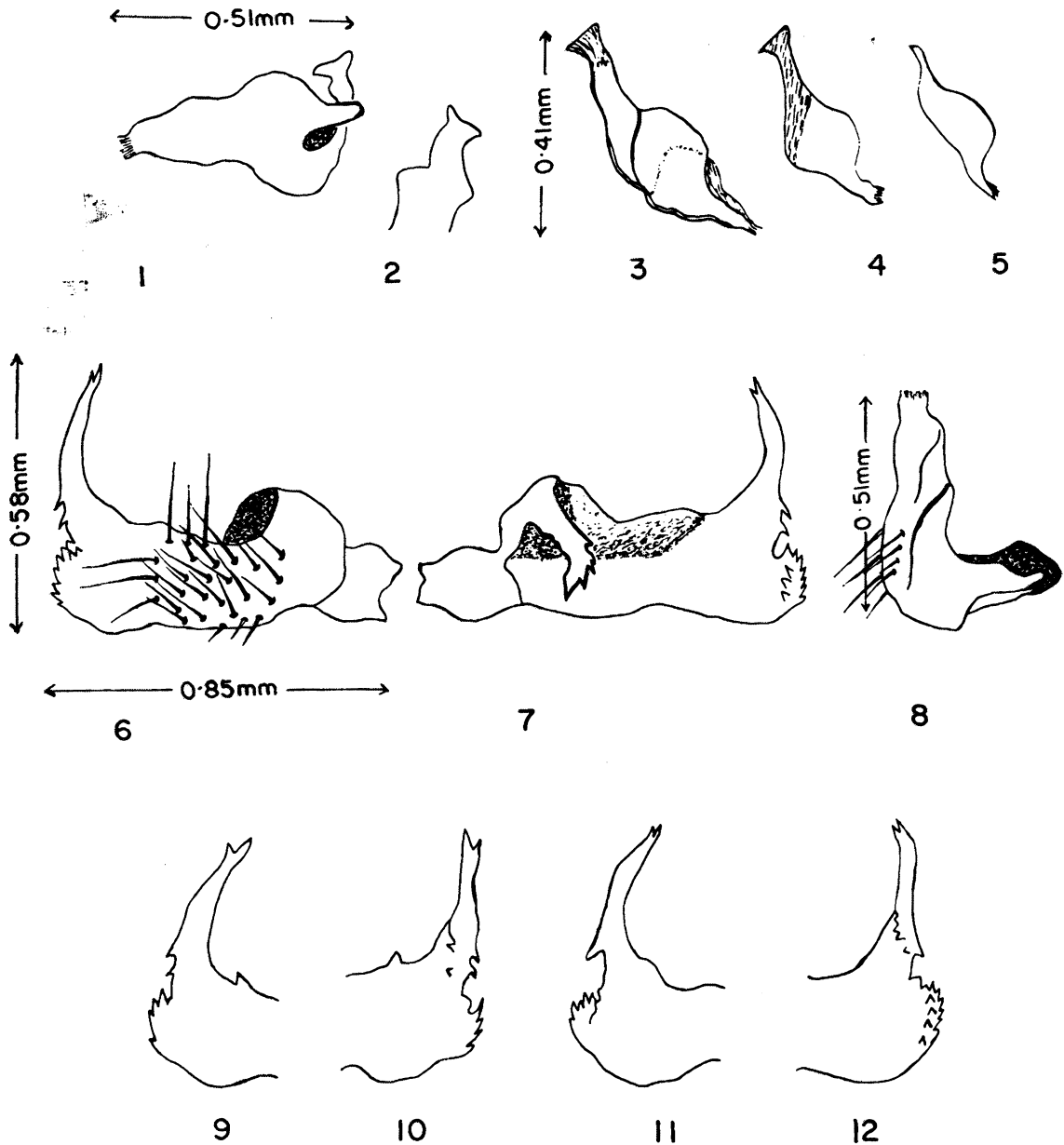


FIG. 1-12.—Genital claspers. 1-3, *D. madisonensis*. 1, Left clasper, lateral; 2, internal arm of left clasper; 3, right clasper, lateral. 4, *D. manitou*. Right clasper (redrawn from Knight 1921). 5, *D. pimicola*. Right clasper (redrawn from Knight 1921). 6-12, *L. medleri*. 6, Right clasper, dorsal (holotype); 7, right clasper, ventral (holotype); 8, left clasper, dorsal (holotype); 9, right clasper, dorsal (in part) (paratype 1); 10, same, ventral; 11, right clasper, dorsal (in part) (paratype 2); 12, same, ventral.

ing. Pubescence on dorsum dense and closely set, made up of erect black bristles intermixed with recumbent sericeous pubescence. *Legs* dark red; anterior and ventral surfaces with a distinct series of black shiny dots. *Venter* red with darkening on genital segments. *Genital claspers* as in Fig. 6-12.

*Paratypes*.—2 ♂, same data as holotype.

*Comments*.—The descriptions given for this species were made while the specimens were in alcohol; subsequent reclaiming and pointing have since led to shrivelling of antennal Segments III and IV in the holotype and loss of some of the sericeous pubescence in the paratypes. The genital claspers show some intraspecific variations (Fig. 6-12) but are still

quite distinctive. The right genital clasper suggests affinity with *L. rolfsi* Knight and *L. nigridea* Uhler but *medleri* differs markedly from these 2 species in general coloration and pubescence (Knight 1965, Uhler 1895). The pubescence and coloration suggest affinity with *L. serica* Knight (Knight 1923) but *medleri* differs strikingly from this species in the structure of the genital claspers.

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#### REFERENCES CITED

- Knight, H. H.** 1921. Monograph of the North American species of *Deraeocoris*—Heteroptera: Miridae. Univ. Minn. Agric. Exp. Stn. Tech. Bull. 1. p. 88, 150-3.
1923. A fourth paper on the species of *Lopidea* from the United States (Hemiptera: Miridae). Entomol. News 34: 65-72.
1941. The plant bugs or Miridae of Illinois. Ill. Nat. Hist. Surv. Bull. 22(1): 72-73.
1965. Old and new species of *Lopidea* Uhler and *Lopidiella* Knight (Hemiptera: Miridae). Iowa State J. Sci. 40(1): 1-26.
- Uhler, P. R.** 1895. A preliminary list of the Hemiptera of Colorado with descriptions of new species. Bull. Colo. Agric. Exp. Stn. no. 30, p. 30-31.

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