



12-20-2010

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Recommended Citation

Hatten, Timothy D.; Merz, Norm; Johnson, James B. 'Ding'; Looney, Chris; Ulrich, Travis; Soultis, Scott; Capilo, Roland; Bergerone, Dwight; Anders, Paul; Tanimoto, Philip; and Shafii, Bahman (2010) "Note on occurrence of *Mymaromella pala* Huber and Gibson (Hymenoptera: Mymarommatidae) in Montana: a new state record," *Western North American Naturalist*. Vol. 70 : No. 4 , Article 17.

Available at: <https://scholarsarchive.byu.edu/wnan/vol70/iss4/17>

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Note on occurrence of *Mymaromella pala* Huber and Gibson (Hymenoptera: Mymarommatidae) in Montana: a new state record

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NOTE ON OCCURRENCE OF *MYMAROMELLA PALA* HUBER AND GIBSON
(HYMENOPTERA: MYMAROMMATIDAE) IN MONTANA:
A NEW STATE RECORD

Timothy D. Hatten¹, Norm Merz², James B. ‘Ding’ Johnson³, Chris Looney^{3,8}, Travis Ulrich³, Scott Soultz², Roland Capilo², Dwight Bergeron⁴, Paul Anders⁵, Philip Tanimoto⁶, and Bahman Shafii⁷

ABSTRACT.—The parasitic wasp *Mymaromella pala* Huber and Gibson (Hymenoptera: Mymarommatidae) was collected at 4 sites within a canyon reach of the Kootenai River in Lincoln County, Montana. This minute species has only recently been described, but it appears to have a large distribution throughout the United States and to be associated with upland and riparian forests.

Key words: *Mymarommatidae*, *Mymaromella pala*, Montana, Kootenai River, pitfall traps.

RESUMEN.—La avispa parasitaria *Mymaromella pala* Huber y Gibson (Hymenoptera: Mymarommatidae) se recolectó en cuatro sitios a lo largo de un cañón del Río Kootenai en Lincoln Co., MT. Hace poco que se describió esta especie diminuta, pero parece tener una distribución extensa en los EE.UU. y estar asociada con bosques altos y ribereños.

The Mymarommatoida (Hymenoptera) is comprised of 2 families: the extinct Gallorommatidae and the Mymarommatidae, which includes fossil and extant taxa (Huber et al. 2008). Of the 10 extant species of Mymarommatidae, *Mymaromella pala* Huber and Gibson is 1 of 2 species known to occur in the Nearctic region. Despite only being recently described (Huber et al. 2008), the species is known to have a broad distribution. Specimens had been collected in 6 eastern states (Maryland, Michigan, New York, North Carolina, South Carolina, and Virginia), Ontario, Canada, and one western state (California) when the species was described (Huber et al. 2008). Since that time, Johnson et al. (unpublished data) found 5 specimens of *M. pala* in Boundary County, Idaho.

During a study designed to detect ecological effects of Libby Dam operations on the Kootenai River and floodplain, 6 specimens of *M. pala* were collected in nonbaited pitfall traps from 4 sites within a canyon reach of the Kootenai River in Lincoln County, Montana (Fig. 1). Specimens of this minute (<1.0 mm) wasp were identified to family using Gibson

(1993), to genus using Gibson et al. (2007), and to species using the key and original species description in Huber et al. (2008).

The Kootenai River sites have been sampled 3 times each year since 2005, but Mymarommatidae was not detected until 2008. All sites reported herein are located in Lincoln County, Montana, and are found from 0.5 to 35.6 km downstream of Libby Dam, Montana. Occurrence of *M. pala* in Montana represents a new state record for the species and family. Additional collection data are as follows: Site 1-184, 0.5 km W of Libby Dam, elevation 659 m, 48°24'27.0", -115°19'8.4", 9 September 2008, D. Bergeron and S. Fuller; Site 1-054, 2.1 km W of Libby Dam, elevation 654 m, 48°23'36.4", -115°19'40.8", 9 September 2008, D. Bergeron and S. Fuller; Site 1-150, 5.1 km W of Libby Dam, elevation 649 m, 48°21'54.1", -115°19'15.6", 9 September 2008, D. Bergeron and S. Fuller; Site 3-010, 35.6 km W of Libby Dam, elevation 592.7 m, 48°26'53.5", -115°47'31.2", 16 September 2008, D. Bergeron and S. Fuller. Specimens were deposited in the William F Barr Entomology Museum at the University of Idaho, Moscow, Idaho, and the

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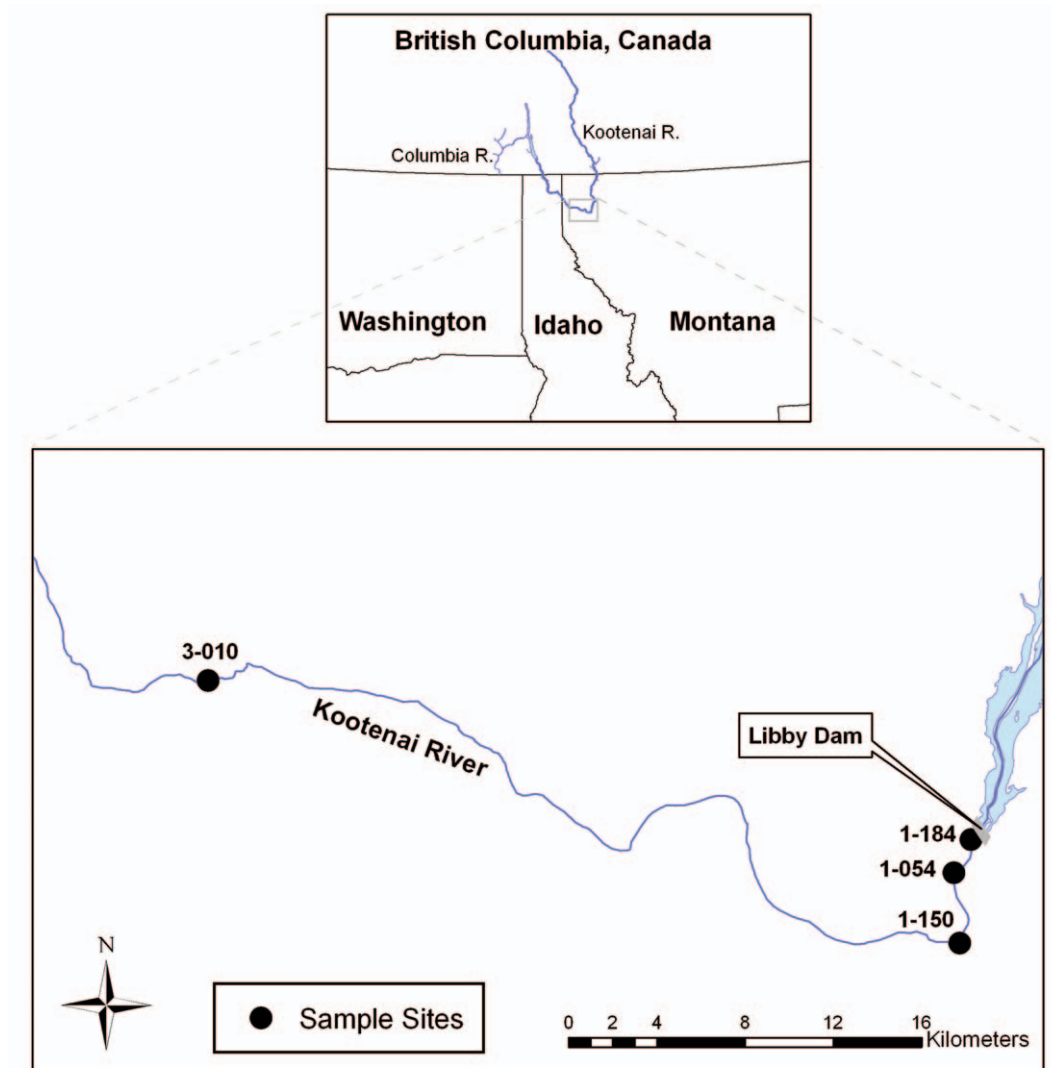


Fig. 1. Sample sites where *Mymaromella pala* was collected during 2008 in the Kootenai River floodplain of Lincoln County, Montana.

Montana Entomological Collection at Montana State University, Bozeman, Montana.

Mymaromella pala was collected in different habitats among sites, for example, broadleaf species including black cottonwood (*Populus trichocarpa* Torrey & Gray, [Salicaceae]) in 1-054 and 1-150, Douglas-fir (*Pseudotsuga menziesii* [Mirbel] Franco, [Pinaceae]) in 3-010 and mixed conifers (*P. menziesii*, *Pinus ponderosa*, etc.) in 1-184. Johnson et al. (unpublished data) also found *M. pala* in mature black cottonwood galleries in a braided reach of the Kootenai River watershed in northern Idaho, approximately

42 km downstream of site 3-010. These habitat associations are consistent with those reported by other researchers who found the wasp primarily in upland and riparian forests (Gibson 1993, Huber et al. 2008).

Circumstantial evidence indicates that insect eggs, especially those of barklice (Psocoptera), are the probable host(s) of *M. pala* (Huber et al. 2008). Barklice were also captured at the Kootenai River sites, and more specifically, in a trap with *M. pala* in site 3-010. Suitable habitat for these detritivorous/fungivorous insects is plentiful along the river.

We thank the Kootenai Tribe of Idaho for making this research possible and the Bonneville Power Administration for their financial support (Project Number 2002-011-00).

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Received 7 April 2010
Accepted 11 August 2010