

The Great Lakes Entomologist

Volume 28
Numbers 3 & 4 -- Fall/Winter 1995 *Numbers 3 &
4 -- Fall/Winter 1995*

Article 8

January 1995

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Recommended Citation

Williams, Andrew H. 1995. "Adult Female *Mydas Clavatus* (Diptera: Mydidae) Feeding on Flowers in Wisconsin," *The Great Lakes Entomologist*, vol 28 (3)

DOI: <https://doi.org/10.22543/0090-0222.1888>

Available at: <https://scholar.valpo.edu/tgle/vol28/iss3/8>

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ADULT FEMALE *MYDAS CLAVATUS* (DIPTERA: MYDIDAE)
FEEDING ON FLOWERS IN WISCONSIN

Andrew H. Williams¹

ABSTRACT

An adult female of *Mydas clavatus* was observed feeding on flowers. This confirms that females of this species feed as adults and that they feed on flowers. This species is reported for the first time from Wisconsin and Minnesota.

On 29 July 1994, an adult female *Mydas clavatus* (Drury) was collected at Thomas Wet Prairie in Grant Co., Wisconsin. She was observed on flowers of *Spiraea alba* and *Pycnanthemum virginianum*. She seemed to be nectaring, conceivably she was feeding on pollen, but her movement from flower to flower across the inflorescences showed that her interest was in the flowers themselves. She showed no interest in other insects. Pollinia of *Asclepias* sp. were stuck on her mouthparts and on a protarsal spine, indicating that she had also visited milkweed flowers. Collected at noon, on a hot, sunny day, the author's specimen #1608 is now in the Insect Research Collection (IRC) of the University of Wisconsin - Madison. This confirms that adult females of *M. clavatus* feed on flowers.

DISCUSSION

We know little about the life histories of most Mydidae. Whether adult mydids are predators of other insects or feed on flowers has long been discussed (Malloch 1915, Papavero and Wilcox 1968, Cole 1969, Papavero and Knutson 1975, Wilcox 1981, Richter and Zaitzev 1988), and it has been unclear whether or not adult females feed at all (Papavero and Knutson 1975, Richter and Zaitzev 1988).

Zaitlin (1978) and Zaitlin and Larsen (1984) found the lack of piercing mouthparts in *M. clavatus* indicative of nectar feeding rather than predation. They found that males and females have identical head morphologies and can be seen feeding together on flowers, especially of *Asclepias syriaca*, but also of *A. verticillata*, *Monarda punctata*, *Teucrium canadense*, *Verbena hastata* and *Saponaria officinalis*. Hart and Malloch (Malloch 1915) collected adults on flowers of *Asclepias* sp. Davis (1921) reported being bitten by *M. clavatus*, "... the bite being very painful for the moment." This would seem to indicate the presence of piercing mouthparts, but it's likely that Davis was pinched rather than bitten, as Malloch (1915) reported, "... that the insect can pinch rather severely with the hind femora and tibiae."

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Wilcox, Papavero and Pimentel (1989) mapped the distribution of *M. clavatus* using specimen data from several prominent collections. Their map shows the species to be widely distributed across the eastern United States and southernmost Ontario but absent from Wisconsin and Minnesota. *Mydas clavatus* specimens in the IRC, Milwaukee Public Museum, University of Michigan and Illinois Natural History Survey include single flies collected in Grant, Monroe, Pepin, Shawano and Waupaca counties in Wisconsin, and in Winona County, Minnesota, and two collected in Wood County, Wisconsin. The Field Museum, University of Minnesota and University of Kansas have none of these flies from this region in their collections. This extends the known range of this fly to the northwest, to include the southern half of Wisconsin and southeastern Minnesota. *Mydas clavatus* has rarely been collected in this region, a fact which, given the great size of this fly and its striking coloration, makes it likely that this species is rare at the northwest periphery of its range.

ACKNOWLEDGMENTS

This paper results from the Prairie Insect and Spider Inventory of The Prairie Enthusiasts - Southwest Chapter, basic biotic research being conducted at Thomas Wet Prairie with support from The Prairie Enthusiasts - Southwest Chapter, the Citizens Natural Resources Association of Wisconsin, the Natural History Museums Council of UW - Madison and several private donors, support for which I am most grateful. I am also grateful to D. Young and S. Krauth of the Entomology Department of UW - Madison for their interest in this research, and to G. Noonan, M. F. O'Brien, P. Parrillo, C. Reed, D. Webb and J. Welch-Jolly for their help with collection data at their respective institutions.

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