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**First Report of *Leptomantispa pulchella* (Banks, 1912)
(Neuroptera: Mantispidae) from Iowa**Edwin L. Freese¹ and Paul K. Lago²**Abstract**

An adult specimen of *Leptomantispa pulchella* (Banks) (Neuroptera: Mantispidae) was collected in southeast Iowa. Published records indicate the species is present in southwestern Canada and much of Central America, but this is the first published report of this species from Iowa.

An adult specimen of *Leptomantispa pulchella* (Banks) (Neuroptera: Mantispidae) was collected by the first author, 23 July 2005, using a combination uv-fluorescent light. The collection site in southeast Iowa is at the Headquarters of Shimek State Forest near Farmington, Van Buren County, which is about two miles from the Des Moines River and Missouri state border. The specimen was identified by the second author and deposited in the first author's insect collection. In November 2010, during an e-mail exchange with Norm Penny (California Academy of Sciences), it was discovered that the specimen may represent a new Iowa state record (Jacques 1935, Penny et al. 1997, Hoffman 2002, Cannings and Cannings 2006). Thus, this is the first published report of this species from Iowa.

This species was first described as *Mantispa pulchella* by Nathan Banks in 1912, with the Type specimen being from Eureka, Utah. The generic name was later changed to *Mantispa* by Waro Nakahara in 1913 (Norm Penny, personal communication; article in Japanese). The genus *Mantispa* was first published by the German entomologist Johann Karl Wilhelm Illiger in 1798 and is derived from the Greek *mantis* for soothsayer or prophet; the specific name *pulchella* is Latin for beautiful. Kevin Hoffman (2002) later changed the generic name to *Leptomantispa* which is from the Greek *lepto* meaning thin, slender, or frail. Specimens generally range in size from 11 to 15 mm in length; color is pale to light yellow with brownish to black markings while the wings are clear with dark veins (Banks 1912, Hoffman 2002, Cannings and Cannings 2006).

There are published records from southern Canada and much of Central America. Hoffman et al. (2002) indicated the species occurs from "southwestern Canada south to Costa Rica, including Cuba." Cannings and Cannings (2006) reported the species from "south-central British Columbia and the Windsor area of extreme southwestern Ontario. In the United States it ranges over most of the western states, south through California and Utah to Arizona and Texas, east to Illinois, Ohio, and New York south to the Carolinas and Georgia, and south through Mexico to Costa Rica and has been recorded from Cuba." Penny et al (1997) listed "Distribution: CO, GA, IL, NC, SC, UT." The most recent article

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on the Neuroptera of Iowa (Jacques 1935) included only two species: *Mantispa brunnea* Say, 1824 (currently in the genus *Climaciella*) and *M. interrupta* Say, 1825 (currently in the genus *Dicromantispa*).

Specimens of *Leptomantispa pulchella* are known from Missouri (Kristin Simpson, personal communication), “NC, SC, GA, FL, MS, TX, AZ, and CA, as well as a few exotic locales” (Paul Skelley, personal communication), but not Wisconsin (Steve Krauth, personal communication). Kurt Redborg (personal communication) of Coe College, Cedar Rapids, Iowa, indicated that *Leptomantispa pulchella* first instar larvae are easily collected on spiders in the local area.

Individuals wishing to identify mantispids collected in Iowa, as well as other areas in the north-central states, will find the key presented by Cannings and Cannings (2006) to be very useful.

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Literature Cited

- Banks, N. 1912.** Notes on Nearctic Mantispidae. Proceedings of the Entomological Society of Washington 14(3): 178-179. Available from <http://www.biodiversitylibrary.org/item/20238> (accessed December 2010).
- Cannings, R. A., and S. G. Cannings. 2006.** The Mantispidae (Insects: Neuroptera) of Canada, with notes on morphology, ecology, and distribution. The Canadian Entomologist 138(4): 531-544.
- Hoffman, K. M. 2002.** Family Mantispidae. Pages 251-275. Norman D. Perry, editor. A guide to the lacewings (Neuroptera) of Costa Rica. Proceedings of the California Academy of Sciences 53(12): 161-457. Available from <http://www.biodiversitylibrary.org/item/53713> (accessed December 2010).
- Illiger, J.C.W. 1798.** Versuche einer Natürlichen Ordnungen und Gattungen der Insekten, p. 489-501. In: J.O. Kugelann (Ed.). Vereichniss der Käfer Preussens. Halle, J.J. Gerbauer.
- Jacques, H. E. 1935.** A preliminary list of the Neuroptera of Iowa. Proceedings of the Iowa Academy of Science 42: 185-187.
- Nakahara, W. 1913.** *Mantispa* and *Mantisvilla* (in Japanese). Zoological Magazine 25: 351-352.
- Penny, N. D., P. A. Adams, and L. A. Stange. 1997.** Species catalog of the Neuroptera, Megaloptera, and Raphidioptera of America, north of Mexico. Proceedings of the California Academy of Sciences 50(3): 39-114. Available from <http://www.biodiversitylibrary.org/item/53426> (accessed December 2010).