Corrected Species Identification of the Predator Orius pumilio (Heteroptera: Anthocoridae) in a Research Colony

Authors: Shapiro, Jeffrey P., and Ferkovich, Stephen M.

Source: Florida Entomologist, 92(2) : 399

Published By: Florida Entomological Society

URL: https://doi.org/10.1653/024.092.0234

CORRECTED SPECIES IDENTIFICATION OF THE PREDATOR *ORIUS PUMILIO* (HETEROPTERA: ANTHOCORIDAE) IN A RESEARCH COLONY

JEFFREY P. SHAPIRO[1] AND STEPHEN M. FERKOVICH[1,2]
[1]Center for Medical, Agricultural, and Veterinary Entomology, Agricultural Research Service, U.S. Dept. of Agriculture, 1600 SW 23rd Drive, Gainesville, FL 32608

[2]Retired

Our laboratories have reported on the predatory minute pirate bugs (Family Anthocoridae) in a research colony that was obtained in Dec 2002. The species was originally thought to be *Orius insidiosus* (Say) (Ferkovich & Shapiro 2004a, 2004b, 2007; Ferkovich & Shapiro 2005a, 2005b, 2005c; Ferkovich et al. 2007). However, specimens from the colony were identified as *O. pumilio* (Champion) by T. Lewis (USDA, ARS, Wapato, WA) in Apr 2008, not *O. insidiosus* as previously reported in the publications listed above.

In response to the discovery of *O. pumilio* in our acquired colony, repeated collections from flower heads of false Queen Anne's Lace (*Ammi majus*) on an organic farm in Gainesville, Florida, yielded both species in unequal numbers and at differing sex ratios. Conclusive identifications of *O. pumilio* from the laboratory colony and field collections, and *O. insidiosus* from field collections, were confirmed by T. Henry (USDA-ARS Systematic Entomology Laboratory, National Museum of Natural History, Smithsonian Institution, Washington, D.C.).

ACKNOWLEDGMENTS

We acknowledge the critical taxonomic contributions of Tamera Lewis and David Horton (USDA, ARS, Wapato, WA) and Thomas Henry (USDA, ARS, Washington, DC), the taxonomic guidance of Julieta Brambila, and the excellent technical assistance of Jean Thomas, Rafael (Andy) Vega, and Kirk Martin (USDA, ARS, Gainesville, FL). Thanks to Kimberly Gallagher for information regarding the original collection site, and initial observations on co-occurrence of the 2 species.

REFERENCES CITED

FERKOVICH, S. M., AND SHAPIRO, J. P. 2004a. Comparison of prey-derived and non-insect supplements on egg-laying of *Orius insidiosus* maintained on artificial diet as adults. Biol. Control 31: 57-64.

FERKOVICH, S. M., AND SHAPIRO, J. P. 2004b. Increased egg-laying in *Orius insidiosus* (Hemiptera: Anthocoridae) fed artificial diet supplemented with an embryonic cell line. Biol. Control 31: 11-15.

FERKOVICH, S. M., AND SHAPIRO, J. P. 2005a. Enhanced oviposition in the insidious flower bug, *Orius insidiosus* (Hemiptera: Anthocoridae) with a partially purified nutritional factor from prey eggs. Florida Entomol. 88: 253-257.

FERKOVICH, S. M., AND SHAPIRO, J. P. 2005b. Erratum to "Comparison of prey-derived and non-insect supplements on egg-laying of Orius insidiosus maintained on artificial diet as adults" [Biol. Control 31 (2004) 57-64]. Biol. Control 32: 180.

FERKOVICH, S. M., AND SHAPIRO, J. P. 2005c. Erratum to "Increased egg-laying in Orius insidiosus (Hemiptera: Anthocoridae) fed artificial diet supplemented with an embryonic cell line" [Biol. Control 31 (2004) 11-15]. Biol. Control 32: 181.

FERKOVICH, S. M., AND SHAPIRO, J. P. 2007. Improved fecundity in the predator *Orius insidiosus* (Hemiptera: Anthocoridae) with a partially purified nutritional factor from an insect cell line. Florida Entomol. 90: 321-326.

FERKOVICH, S. M., VENKATESAN, T., SHAPIRO, J. P., AND CARPENTER, J. E. 2007. Presentation of artificial diet: effects of composition and size of prey and diet domes on egg production by *Orius insidiosus* (Heteroptera: Anthocoridae). Florida Entomol. 90: 502-508.