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

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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.).

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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* (Hemiptera: Anthocoridae). *Florida Entomol.* 90: 502-508.