## The Multicolored Invasive Asian Ladybird *Harmonia* axyridis (Pallas, 1773) (Coleoptera: Coccinellidae) New to the Fauna of Bulgaria

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## Abstract:

Two adults of the multicolored ladybird, *Harmonia axyridis* (Pallas, 1773) (Coleoptera: Coccinellidae) were identified in 2009 during the examination of old samples collected in July 2008 at Sofia. In July 2009, larvae of *H. axyridis* were collected from *Paliurus spina-christi* Mill. infested by *Aphis* sp. at Kresna defile (near Blagoevgrad). Large reproductive populations of *H. axyridis* were found in Sofia on *Tilia cordata* Mill., *Quercus rubra* L. and *Acer pseudoplatanus* L., heavily infested respectively by *Eucallipterus tiliae* (L.), *Myzocallis walshii* (Monell) and *Drepanosyphum* sp. Four colour forms have been recorded in Bulgaria f. *succinea*, f. *spectabilis*, f. *conspicua* and f. *axyridis* but the *succinea* phenotype was dominant in all samples. The invasion of *H. axyridis* in Bulgaria is still at an early stage and probably started in summer 2009. By the end of August 2009, *H. axyridis* occurred in all regions of Sofia. Our results suggest that the infestation by *Eucallipterus tiliae* on *Tilia cordata* was the main reason for the spread of *H. axyridis* in Sofia. The first detection of the species in summer 2008 and the presence of large reproductive populations in Sofia in 2009 allows us to conclude that the species is established in Bulgaria.

Key words: Coccinellidae, Harmonia, invasive species, establishment, colour forms, Bulgaria

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