New findings and distribution of the introduced moth *Acontia candefacta* (Lepidoptera: Noctuidae) in Serbia (Southeast Europe)

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The Neartic moth *Acontia candefacta* is considered a successful agent for biological control of *Ambrosia artemisiifolia* (Asterales: Asteraceae). It is the first insect species that was intentionally introduced into Europe for biological control of an invasive weed species. Several new findings of the moth have been recorded at five new locations in Serbia (Southeast Europe) using light trapping. In this study, we present and discuss the current distribution in Europe and the expansion of the range based on geographic information system (GIS) data. Using GIS techniques, we mapped the distribution and quantified values of environmental variables within the range of the analyzed moth species. We assume that further spreading of *A. candefacta* in Europe is probably closely linked with ongoing climate changes and future expansion of the host plant. New findings of the moth in Europe will help us to predict future paths of expansion. Future studies should be devoted to gaining an understanding of the precise role of the moth as an agent for biological control of *A. artemisiifolia*.