

THE RECENT COLONISATION AND RAPID SPREAD IN BELGIUM OF THE ALIEN GIRDLED SNAIL *HYGROMIA CINCTELLA* (GASTROPODA: HYGROMIIDAE)

H. cinctella (Draparnaud, 1801) originates from southern Europe. Its native range extends from northwest Croatia, along the Mediterranean, to the southeast of France (Welter-Schultes, 2012). The species has been introduced into several European countries, including the Netherlands, Germany, Austria, Switzerland, Britain, Ireland and the Czech Republic (Říhová & Juříčková, 2011).

In Belgium, *H. cinctella* was collected for the first time in May 1994 in Honnelles (Bois d'Angre). There was a twelve year gap before the second observation, which occurred in November 2006 in Labussièrre (Carrière des

Carmes) and between 2007 and 2011 four more localities were found. Since 2012 the number of observations has increased significantly with *H. cinctella* now occurring in at least 45 localities in 37 UTM 5 km squares (Fig. 1). Most often *H. cinctella* was found along rivers and canals (16 localities), in gardens and parks (11 localities) and in or along the edges of small woodlands (11 localities). It was also found along railroad tracks, on construction sites and on waste land. *H. cinctella* has been found on a variety of herbs, *Urtica dioica* being the most frequent. It was also observed on leaves of woody plants, including *Rubus* sp., *Salix* sp., *Sambucus nigra* and on the

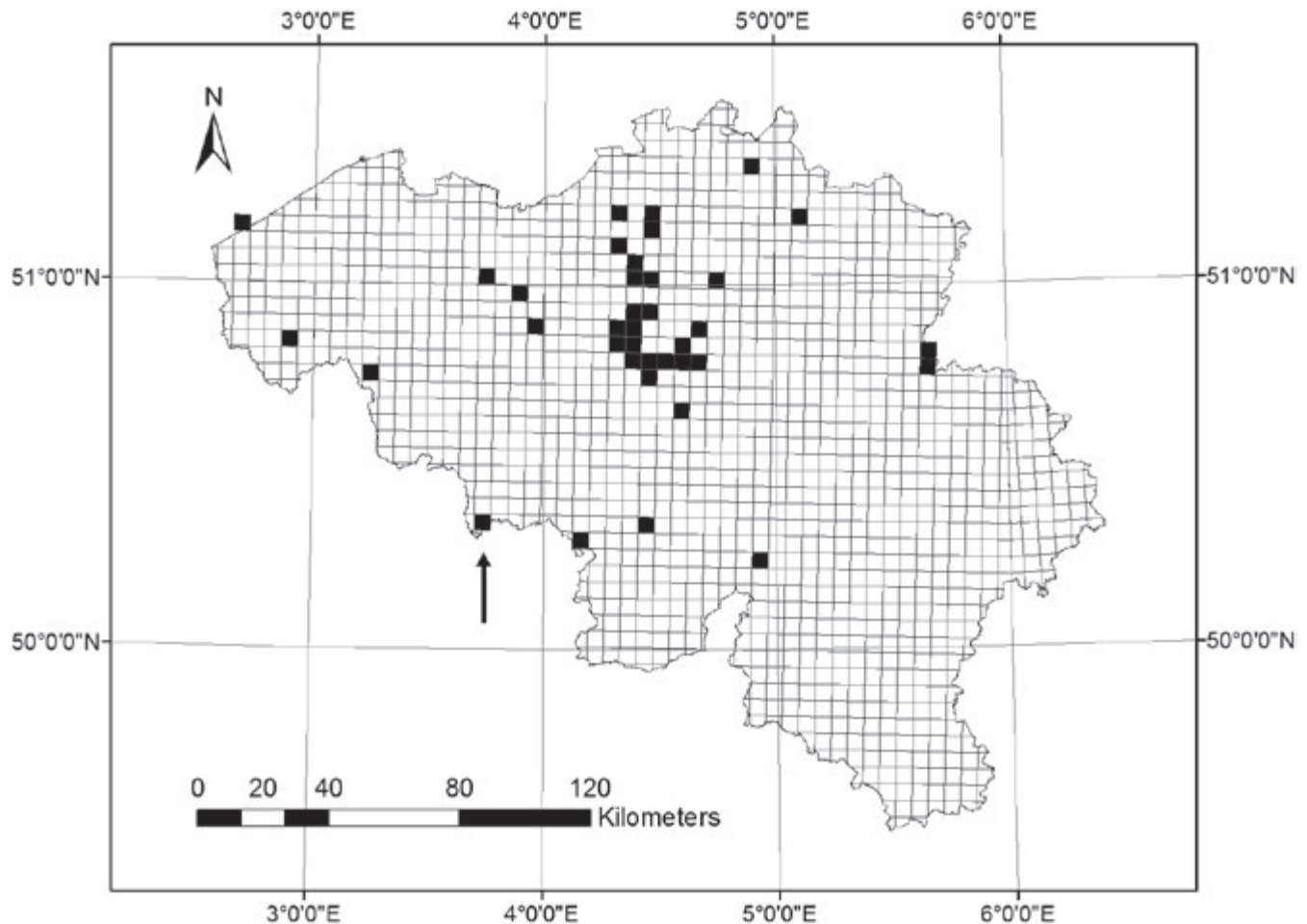


Figure 1 Recorded distribution up to October 2nd 2014 of *H. cinctella* in Belgium on a 5 km UTM grid, compiled from literature (Neckheim, 2007; Jacobs & Hansen, 2009) and previously unpublished records. The black arrow indicates the first recorded population.

stems of *Acer pseudoplatanus*. Occasionally it was found attached to brick walls, fence posts, gates, building material or rubble (Neckheim, 2007; Jacobs & Hansen, 2009; www.waarnemingen.be). Both juvenile and adult specimens were found at most localities. Several populations are known to persist, including the one in Honnelles and, therefore, *H. cinctella* seems to be firmly established in Belgium.

H. cinctella may actively expand its range along watercourses and railroad tracks. Dispersal along rivers has been suggested by Wimmer (2006) and Beckmann & Kobialka (2008). Moreover, Defosse & Maurin (1995) believe that *H. cinctella* has naturally expanded its range from the Rhône valley to the north of France. Its occurrence in gardens and on construction sites indicates, however, that passive dispersal may also be important. Unintentional passive transport with building material and by horticultural activity has been suggested in several studies (Comfort, 1950; Preece, 2005; Beckmann & Kobialka, 2008; Říhová & Juříčková, 2011). Habitat preference of *H. cinctella* needs further study, but the sites where the species has been found in Belgium seem to be similar to those in other countries (Comfort, 1950; Preece, 2005; Mienis, 2010; Říhová & Juříčková, 2011). Although Mienis (2010) reports damage on garden plants, it is unknown whether the presence of *H. cinctella* has adverse effects on indigenous fauna and flora.

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