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Quentin ROME, Lucile DAMBRINE, Coralie ONATE, Franck MULLER, Claire VILLEMANT, Ana L. GARCÍA-PÉREZ, Miguel MAIA, Paulo CARVALHO ESTEVES & Etienne BRUNEAU. – **Spread of the invasive hornet *Vespa velutina* Lepeletier, 1836, in Europe in 2012 (Hym., Vespidae)**

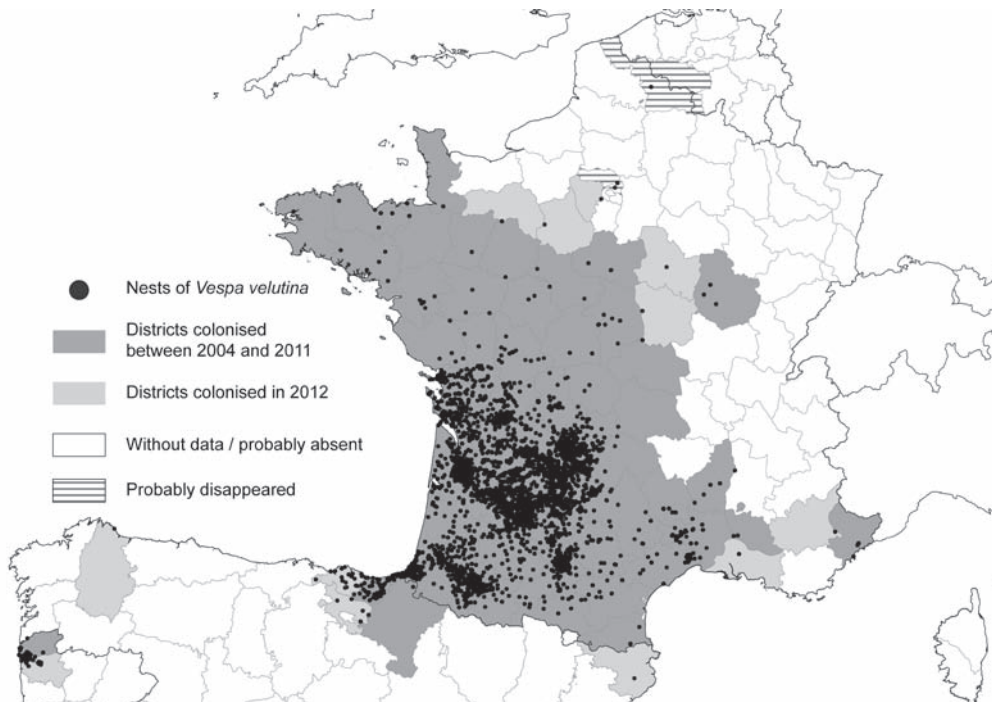


Fig. 1. – Distribution of *Vespa velutina* Lepeletier in Europe from 2004 to 2012 (data INPN, 2013).

Since its introduction in Lot-et-Garonne, a southwestern French district, before 2004 (VILLEMANT *et al.*, 2006), the presence of this invasive honeybee predator is recorded through online biodiversity databases (INPN, 2013; NATAGORA, 2013) depending on public contributions or beekeepers' networks (Apimil, Cari,...).

In 2012, seven new districts were colonized in France (fig. 1). Neither individuals nor nests were observed in Belgium and in the Nord French district where it had been observed last year, suggesting that this introduction has aborted like in Paris region in 2009 (ROME *et al.*, 2012). *Vespa velutina* arrived in Northern Spain in 2010 (CASTRO & PAGOLA-CARTE, 2010; LÓPEZ *et al.*, 2011); it has already colonized the three provinces of the Basque country (Diputaciones Forales, pers. comm.), and recently crossed the Pyrenees in Catalonia (J. Pujade, pers. comm.). Workers were observed in Galicia region (S. Asorey, pers. comm.) where founders might have been unintentionally introduced. Unlike in Belgium, *V. velutina* has permanently settled in Northern Portugal and colonized Braga district after Viana do Castelo last year (GROSSO-SILVA & MAIA, 2012).

In 2012, *Vespa velutina* is present in 66 European districts (360,000 km<sup>2</sup>). It spreads at around 100 km per year, with several accidental introductions away from the invasion front (ROME *et al.*, 2009). There is currently no efficient method to control this species, which will most probably colonize the major part of the continent (VILLEMANT *et al.*, 2011).

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