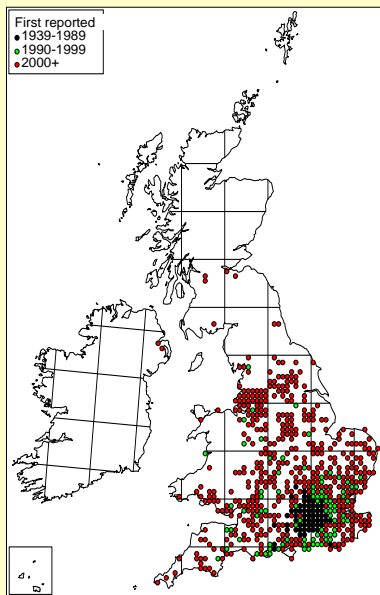


Monitoring of four invasive non-native garden pests

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The Entomology section of the Royal Horticultural Society (RHS) is collating records of four invasive non-native garden pest insects following their establishment in the UK. Data collection has previously relied on data gathered from RHS members' enquiries, however in May 2008 internet-based monitoring has been launched.

Lily beetle – *Lilioceris lili*



Distribution of the Lily beetle in Britain and Ireland (December 2007). Produced using DMAP®



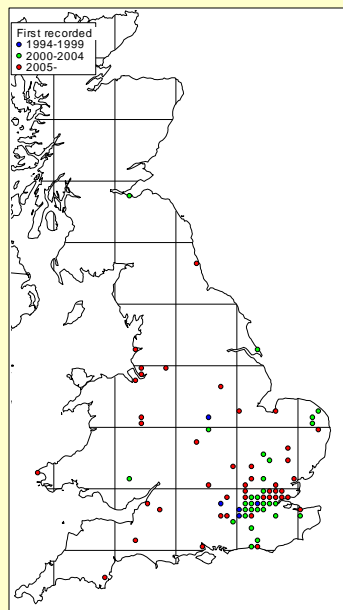
Adult lily beetle (Photo R. Key)



Lily beetle larvae (RHS)

Lily beetle is a defoliating pest of lilies (*Lilium*) and fritillaries (*Fritillaria*) that became established in Surrey in the late 1930s. Until the late 1980s the beetle remained confined to south east England. However during the past two decades the beetle has spread rapidly and it is now found throughout England, is widespread in Wales and is spreading in Scotland and Northern Ireland. Little is known about the threat this beetle poses to native Snake's head fritillary (*Fritillaria meleagris*) populations.

Rosemary beetle – *Chrysolina americana*



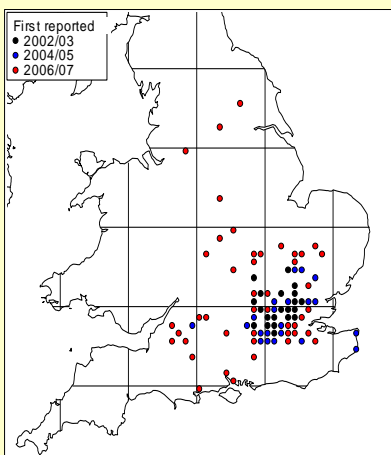
Distribution of Rosemary beetle in Britain (January 2008). Produced using DMAP®



Rosemary beetle adult (RHS)

Rosemary beetle was first reported outdoors in the UK at RHS Wisley Garden in 1994, however it was not found there again until 2000. During that time it became established in London, and is now a common pest in gardens in south east England, with scattered reports from the rest of Britain. Both the adults and the grey grubs defoliate rosemary, lavender and some other related plants.

Berberis sawfly – *Arge berberidis*



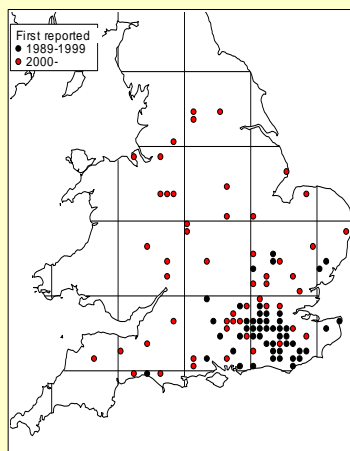
Distribution of Berberis sawfly in England. (December 2007). Produced using DMAP®



Adult Berberis sawfly – (CSL)

The larvae of Berberis sawfly can defoliate some *Berberis* and *Mahonia* species and hybrids. This insect was first reported from Essex in 2002. The sawfly has spread rapidly and has been found across much of southern England. The native *Berberis vulgaris* is a host plant and severe defoliation threatens a rare moth, the Barberry carpet *Pareulype berberata*.

Hemerocallis gall midge – *Contarinia quinquenotata*



Distribution of Hemerocallis gall midge in England and Wales (December 2007) Produced using DMAP®



Hemerocallis gall midge damaged flower buds, right and centre (RHS)

Hemerocallis gall midge had been present in Britain for at least a year before specimens were sent to the RHS members' advisory service from a Surrey garden in 1989. Since then, Hemerocallis gall midge has spread throughout most of England but is still most frequently reported from south east England. The larvae of this 2mm long midge develop within the flower buds and their feeding activities cause buds to become abnormally squat and swollen.

Help the RHS monitor these pests submit sightings at http://www.rhs.org.uk/Learning/Research/project_pest.htm