Alien Invasion: Harlequin Ladybird

#### http://www.harlequin-survey.org/images/ladybird_imgs/h_a_adult_and_pupa.jpg

## What?

Harmonian axyyrid is the real name pf the Harlequin Ladybird (UK name) as well as among many names that this insect has been given such as in North America; Asian lady beetle, or Japanese ladybug. Its colour ranges from yellow-orange to black. It is a vicious predator of Aphids and scale insects.

## Origins;

The Harmonian axyyrid originated from Eastern Asia in countries such as central Siberia, Kazakhstan and Uzbekistan in the west, through Russia south to the Himalayas and east to the Pacific coast and Japan, Korea, Mongolia, China and Taiwan.

#### http://www.wou.edu/~baumgare/harmonia_axyridis_black.jpg

#### http://www.harlequin-survey.org/images/maps/harlequin_years_30Apr12.gifhttp://www.harlequin-survey.org/images/maps/harlequin_years_30Apr12.gifhttp://www.harlequin-survey.org/images/site_graphics/Harmonia_colour_variants_plate.jpg

#### **Where and When?**

#### **WhenWhenWhen?**

#### **It was first introduced to North America from Asia as a source to control plant pests. The Harmonian axyyrid(Harlequins ladybird, UK) made its British debut on September 2004 and has established itself in areas such as Derby and the South- east of England.**

Diagram shows concentration of Harmonian axyyrid over time.

#### http://t1.gstatic.com/images?q=tbn:ANd9GcR4J8R0OVS8TJYoCj9h2adFEkfmo5DLlmhYzm0udFFC1Js74NeP

#### **Why?**

#### **It is well known to be a vicious predator, therefore identified as a bio control agent for aphids and scale insects which was a problem for green houses in many parts or Europe and America. This is why the ladybug has been in introduced in many greenhouse, crop fields and gardens.**

#### **A Harlequins ladybird can eat up to 50 aphids in a day**

#### **Consequences**

#### **Due to the introduction of this ladybird it is jeopardising as much as 46 species of ladybird in the UK, since this species has a longer reproductive period that other species it normally can have larvae around till August thus proving a problem to other ladybug species that are still in hibernation.**

#### **Their prosperity to tuck into grapes has caused havoc in French vineyards**

#### **Solution**

#### **A survey has been initiated by the community such as the Harlequin Ladybird survey which promotes the pest control of the ladybird by getting local communities in all parts of UK involved in the sighting of these ladybirds.**

#### Methods of control include insecticides, trapping, removal of aggregates of beetles and mechanically preventing entry to buildings.

#### Methods under development involve the investigation of natural parasites and pathogens, including the use of parasitic sexually transmitted mites and fungal diseases.

#### The best methods for dealing with them in private homes involve sealing openings they may enter. Sweeping and vacuuming are considered effective methods for removing them from homes though this should be done carefully so as not to trigger the defensive reaction known as reflex breeding.

#### A [nylon](http://en.wikipedia.org/wiki/Nylon) [stocking](http://en.wikipedia.org/wiki/Stocking) placed inside the vacuum cleaner's hose, secured with a [rubber band](http://en.wikipedia.org/wiki/Rubber_band), allows the beetles to be "bagged" rather than collecting inside the machine.A trap designed for indoor use was developed which attracts the beetles with a light and seals them in a removable bag.

#### **Conclusion**

#### In my opinion, the decision to bring in another species to the ecosystem was the wrong decision without fully being prepared for the consequences that come after such as the destruction of many grapes in French vineyards has caused farmers who have no relation to the introduction of the ladybird to suffer the consequences that come afterwards. The government should make an effort to try and control these widespread of insects to prevent further damage to the ecosystem