Determining the geographical origin of Asian Longhorn (*Anoplophora glabripennis*) Beetle specimens

Katharina Heinrich\(^1\)*, Leticia Gaitero\(^1\), James Mathers\(^2\), Joe Ostoja-Starzewski\(^2\), Celine Pye\(^1\), Gareth Rees\(^1\), Larissa Collins\(^2\)*

\(^1\) Food Quality and Safety Programme, Fera Science Ltd., York, UK
\(^2\) Plant Protection Programme, Fera Science Ltd., York, UK

*Katharina Heinrich (katharina.heinrich@fera.gsi.gov.uk) – IRMS
*Larissa Collins (larissa.collins@fera.gsi.gov.uk) - Entomology

**Abstract**

The poster will cover how stable isotope ratio mass spectrometry (SIRMS), an established technique in authenticating food, can be applied for the determination of the origin of invasive insects.

Due to a past outbreak of an EU quarantine-listed pest in Kent (UK), a new development project ‘Determination of the origin of the Asian Longhorn Beetle (*Anoplophora glabripennis*)’ was initiated.

This outbreak resulted in environmentally and financially costly eradication actions. Whilst monitoring at the outbreak site continues, this pest is also occasionally entering the UK with imported materials. Therefore, differentiating between newly-arrived beetles and those from previously undetected invasions would be of immediate practical benefit in making appropriate strategic decisions on surveillance and eradication.

The project outline, preliminary results and further experiments will be shown.