

**Title: PHC2019/1 – Monitoring for the Brown Marmorated Stink Bug (BMSB) *Halyomorpha halys* in Scotland**

**Background:** The brown marmorated stink bug (BMSB) *Halyomorpha halys* (Stål) (Hemiptera: Pentatomidae), native to East Asia, is an invasive species of the shield bug family that was first detected in North America in 1996 and in Europe in 2004. It has been intercepted in the UK on several occasions. It can be introduced either as a hitchhiker on packing material or via plant imports likely posing a 'when' not 'if' risk to crops. The BMSB attacks a wide range of hosts including *Rubus idaeus* (raspberry) and *Prunus avium* (sweet cherry), two main soft and stone fruit crops grown in Scotland. Although it has a minimum threshold for development of 14 degrees, in hot summers generations of 5-6 per year have been reported with females laying 50-400 eggs. The economic impact in Scotland is unknown, but in countries where there are cases of heavy infestations, fruit are damaged and rendered unmarketable. The conditions in Scotland appear to be suitable for the establishment of this pest and the Scottish soft fruit industry are concerned about the threat. The soft fruit industry's supply chain leads to Oceanic vessels who visit and trade with countries with strict biosecurity measures for this pest, and assurances are being sought to verify that every measure is being taken to assess whether the pest is present in Scotland. A failure to do this could have economic consequences for both local markets and on Scottish export markets.

**Impact:** BMSB has been identified by Scottish Government as a policy priority for PHC and this project will provide data for a Scottish specific risk assessment.

**Objectives and research required for this call:**

- Using standardised protocols, undertake a survey for the presence of BMSB on at least two commercial sites selected to maximise the chance of detection.
- Undertake an analysis of the likelihood of spatial and temporal spread in Scotland taking into account the availability and distribution of suitable host plants and the climate both now and in the future.
- All Plant Health Centre projects have a dedicated contact in Scottish Government Plant Health Policy with whom the project details should be discussed and on-going liaison established. At the start of a successful project a member of the policy team, with contact details, will be identified for the project.

**Outputs required:**

The outputs of the exercise will include:

- Single / joint report detailing findings from the study, including a policy recommendation for any further action
- 2 page interim report
- 1-2 page policy summary, including a policy recommendation for any further action

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**Indicative key dates:**

- Deadline for application: 6<sup>th</sup> May 2019 (12pm)
- Project start: 13<sup>th</sup> May 2019
- Overview of plans and project start-up meeting with PHC Directorate: by end May 2019
- Interim (2 page max) report: 1<sup>st</sup> September 2019
- Completed discussion paper and summary: 1st November 2019
- Meeting with Scottish stakeholders: by 30th November 2019

**Date all work needs to be completed by:** 30th November 2019

**Project type:** Call down - collaborative

**Maximum funding available (including overheads and VAT, where applicable):** Indicative cost  
£30,000

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