The bean seed beetle (bean bruchid), is a serious pest of field and broad bean crops and threatens to undermine UK exports of high quality crops to lucrative markets for human consumption.

Bruchid is present across England, with highest populations in the East, South-East and South-West. Levels of pest damage diminish in more northern areas of the country and the pest is not present in Scotland. Females lay eggs on the pod surface and hatching larvae bore through the pod wall into the seed, where the larvae feed and develop into adults. Adults emerge around harvest time leaving a round hole in the beans. Broad beans harvested fresh may show damage due to beetle larvae.

Best timing for spray applications has been difficult to predict; larvae are not exposed to insecticide sprays and adults must be targeted before they lay eggs; there is limited availability of insecticide products that can be used during flowering and careful timing of applications is required to achieve optimum effectiveness. A monitoring trap has been developed using plant volatiles based on the aroma of bean flowers, to attract adult beetles and help predict the onset of activity in crops.

A decision support tool for bean growers (BruchidCast) has been developed to provide predictions of optimum spray dates. A network of monitoring sites is being established in England to support advice to growers about pest presence. Growers can sign up to the BruchidCast forecast at www3.syngenta.com/country/uk/en/AgronomyTools/Pages/BruchidCast.aspx Traps will be commercially available from September 2014.

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