

# New Project

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## PC 302d

*Tomato: Phase 4 of the development  
of a robust IPM programme for Tuta  
absoluta*

<b>Project Number:</b>	PC 302d
<b>Project Title:</b>	<i>Tomato: Phase 4 of the development of a robust IPM programme for Tuta absoluta</i>
<b>Project Leader:</b>	Paul Howlett
<b>Contractor:</b>	Wight Salads Ltd
<b>Industry Representative:</b>	Dr P Morely; Tomato Growers Association
<b>Start Date:</b>	01 January 2013
<b>End Date:</b>	28 February 2014
<b>Project Cost (total project cost):</b>	£23,900 (£33,900)

#### **Project Summary:**

- *Tuta absoluta* is currently the most important pest of tomato crops in the UK. For example, at one UK nursery in 2012, 30% of fruit were damaged by the pest during June / July resulting in losses of approx £50k / ha for that period alone.
- Based on experience gained in Mediterranean countries during 2009 and 2010, Dr Jacobson designed a season-long IPM strategy based on the predatory bug, *Macrolophus*. The components of this programme have been evaluated using a 'modular' approach in which each module has been tested independently. The most effective and compatible modules have now been brought together to form the proposed IPM programme (detailed in Section 10). The complete programme is now ready to be tested in commercial crops.
- The proposed control measures will require some specific fine-tuning for different 'types' of tomato crops. Four sites have been selected to represent conventional rockwool, conventional coir, NFT and organic production.
- The IPM programmes will be implemented by the participating growers and evaluated by Dr Jacobson using techniques that have already been tried and tested in commercial crops.

- WSG has assembled a team of appropriately qualified and experienced personnel to undertake this project. The team have an excellent record of delivering practical solutions and effectively conveying new information to the tomato industry.
- Based on the losses reported above, this project will provide payback in less than one year.

## **Aims & Objectives:**

Project aim:

To create a cost-effective and sustainable IPM programme for *Tuta absoluta* in UK tomato crops

(ii) Project objective(s):

1. To evaluate a prototype IPM programme in four 'types' of tomato crops
2. Draft a Factsheet for UK growers describing in detail the new IPM programme
3. Convey results to tomato industry

## **Benefits to industry**

*Tuta absoluta* is currently the most important pest of tomato crops in the UK. For example, at one nursery in 2012, 30% of fruit were damaged by the pest and graded out during June and July. This represented losses of approx £50k per hectare to that grower for that period alone (Jacobson, 2012).

- ☐ The potential losses from interrupted supplies to supermarkets could be even greater. If larvae of *T. absoluta* are detected inside tomato fruit by retailers, then the produce will be rejected and it is highly likely that further supplies from that source will be put on hold until the grower can provide assurance that the infestation has been completely controlled. It will be very difficult for the grower to find another outlet for that produce at short notice and this could result in very large quantities of produce being dumped. The financial loss could be over £300k per hectare depending on the time of year that the infestation is first detected (Jacobson & Morley, 2010).
- ☐ UK tomato growers desperately require a reliable method of controlling *Tuta absoluta* which can be integrated into the existing IPM programme.

- ☐ The studies will contribute to a robust IPM control strategy and thereby minimise losses in tomato crops.
- ☐ The project team have regular direct input into the TGA Technical Committee and progress will be updated at each meeting. In addition, Dr Jacobson has been a regular speaker at the annual Tomato Conference where he will present the results to the whole industry.

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