

JOB DESCRIPTION & PERSON SPECIFICATION

1. Job title: Post-Doctoral Entomologist/Chemical Ecologist

Centre: PPE

Location: East Malling, Kent

Reports to (Job title): Dr Glen Powell

Line Manages : N/A

This 3-year post is funded by the BBSRC and by industry (Berry Gardens) and builds on our previous discoveries of strong natural interspecific interactions between SWD and its sister species within the *Drosophila melanogaster* species group. The project aims to identify new chemical oviposition deterrents that can be applied within the cropping area to deter fruit damage by SWD, providing a novel approach to control this important invasive pest. The post-doctoral researcher will be based at NIAB EMR but will also work closely with collaborators at the nearby Natural Resources Institute (University of Greenwich) and with technical specialists and advisors from industry.

This position offers an exciting opportunity for a PhD qualified scientist who is a self-motivated and innovative researcher to join the Pest and Pathogen (PPE) Department. The post holder will take responsibility for delivery of this BBSRC and industry-funded project.

Key areas of the job include:

- Ensuring project delivery, including development of experimental protocols, designing experiments, conducting experiments and analysis, and report writing
- Developing collaborative contracts both nationally and internationally
- Keeping abreast of scientific developments and publishing scientific findings
- Supervising technical staff
- Participating in scientific and grower conferences, including presentations
- Actively participating in institute management activities as appropriate

3. Financial authority/responsibility (e.g. delegated budget, authorisation level, approx value of contracts etc):

The post-holder will not be responsible for a budget

4. Key relationships (external and internal):

Internal: Research staff across NIAB and NIAB EMR

External: Collaborators at Natural Resources Institute (University of Greenwich) and with technical specialists and advisors from industry.

Tasks/responsibilities (in order of priority)	Approx % of time
Carrying out bioassays to assess effects of chemical cues on egg-laying by <i>Drosophila</i>	20
Testing behavioural effects of candidate chemicals and formulated deterrents in laboratory trials	15
Testing effects of formulated deterrents in field trials	10
Chemical extraction / air entrainment of behaviourally-active signals	10
Ablation experiments to test roles of sensory organs	10
Laboratory-based assessments of mutant and transgenic flies deficient in the production and detection of semiochemicals	10
Electrophysiological recordings	10
Statistical analysis of data	5
Writing papers	5
Presenting findings at project meetings, grower workshops and scientific conferences	5

6. Working conditions :

- Based at NIAB EMR, Kent.
- Travel abroad.
- Flexible hours including overnight absences.

7. PERSON SPECIFICATION

Education/Qualifications:

Essential:	Desirable:
<ul style="list-style-type: none"> • PhD in relevant semiochemical and/or entomological subject 	<ul style="list-style-type: none"> • Member of learned societies

Experience:

Essential:	Desirable:
<ul style="list-style-type: none"> • Publications in scientific journals 	<ul style="list-style-type: none"> • Knowledge of relevant areas of chemical ecology/horticultural/agricultural entomology • Experience of the horticultural industry • Experience of proposal writing to secure small research and travel grants

Specialist Training:

Essential:	Desirable:
<ul style="list-style-type: none"> • Full UK driving license or access to independent means of transport. 	

Personal Qualities (skills, behaviours and competencies)

Essential:	Desirable:
<ul style="list-style-type: none"> • Willingness to design and carry out experiments • Ability to analyse data using appropriate statistical techniques • Ability to publish scientific findings in appropriate peer-reviewed journals • Ability to identify and solve problems • Ability to communicate with scientists and growers • Ability to act independently and as part of a team • Ability to plan and prioritise work and meet deadlines • Ability to learn quickly • Ability to work within a team • Good presentation skills • Willingness to work flexible hours including overnight absences and travel abroad 	<ul style="list-style-type: none"> • Ability to innovate • Ability to work alone

Date of description: 28th January 2019**Compiled by:** Dr Glen Powell