

Horizons

Developing green insecticides

By 2017 the world is expected to spend more than \$65 billion annually on pesticides. At Glasgow, Professor Shireen Davies wants to take a more environmentally friendly approach to dealing with problem insects.

She is leading a large international team on a €7m project, funded by the European Commission's H2020 programme, that will focus on the development of artificial neuropeptides – small protein-like molecules which help the brain and tissues communicate with each other.

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The scientists will be researching different ways of altering pest insect responses, for example surviving environmental stress, or their appetite, in order to impair the insects' ability to inflict damage while taking care not to harm beneficial insects such as ladybirds.

They also plan to alter neuropeptide signals that control the pheromones moths release to attract mates and tell each other where sources of food are located. 'There is a pressing need for more specific, "green" insecticides,' says Professor Davies, 'that target damaging insects while sparing beneficial ones.'

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