

Oregano oil works as well as synthetic insecticides to tackle common beetle pest

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New research in the *Society of Chemical Industry's Journal of the Science of Food and Agriculture* shows that oregano oil works as well as synthetic insecticides to combat infestation by a common beetle, *Rhizopertha dominica*, found in stored cereals.

Not only does oregano oil work as well as synthetic versions but it has none of the associated side effects of synthetic insecticides on the environment.

Growing resistance to synthetic insecticides combined with potential environmental damage and new government directives on changes to the way chemicals are registered means that scientists are increasingly looking at natural alternatives that can be produced in the large scale quantities needed for agricultural industry use.

Oregano, a member of the Lamiaceae family of plants, has long been renowned as a natural insecticide. It appears to work by inhibiting egg laying and larval development but this is the first time it has been looked at as a viable alternative for synthetic insecticides.

Dr Chahrazed Boutekedjiret and her team from the National Polytechnic in Algeria identified 18 components in oregano oil that combat pests and found that the greater the concentration of the oil used, the more effective it was.

She says: "It is feasible that, in the near future, these natural insecticides

will replace synthetic insecticides and add considerably to more environmentally friendly insecticides on a large scale.”

Dr Alan Baylis, the honorary secretary of the Society of Chemical Industry’s Bioresources Group said: “Just because something is natural does not mean it is harmless to humans – some of the most toxic compounds lethal to humans and other mammals are natural products. However, there will be markets for natural insecticides which have been rigorously tested for safety and efficacy, but as they are difficult to produce on a large scale for agricultural use, then the scope for them is rather limited.”

Source: Society of Chemical Industry

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