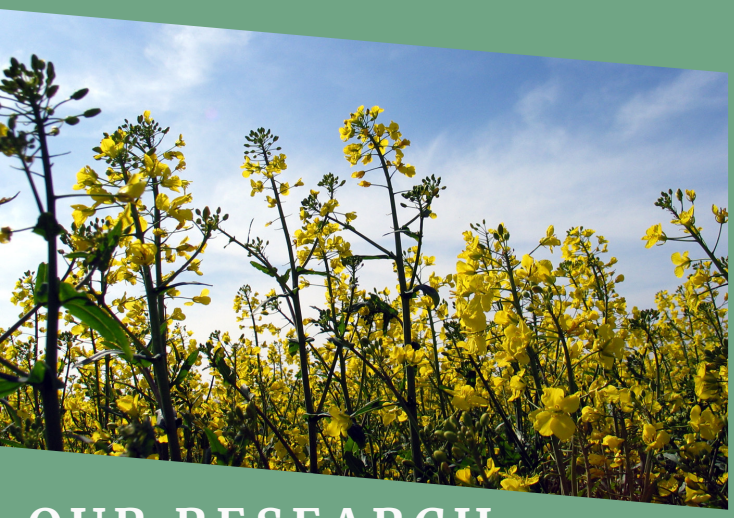
CHARACTERISING FLORAL SCENT TO IMPROVE CROP POLLINATION AND YIELD

John Innes Centre

Unlocking Nature's Diversity



OUR RESEARCH

Insects such as bees are critical for the pollination of many plants, including crops.

We are studying the chemical composition of floral scent in oilseed rape to find out how this varies between varieties and the influence it can have on attracting pollinators and pests.

We are also interested in how the volatile compounds released by the plant influence allergic reactions to oilseed rape.

To investigate this, we are combining analysis of floral scents of oilseed rape varieties with pollinator electrophysiological and behavioural trials.

Our long-term goal is to determine the genetic basis of scent traits to enable integration into market-ready backgrounds, potentially for improved pollinator attraction, reduced pest attraction and reduced allergenicity.

We plan to:

- Characterise the chemical diversity of floral scent within oilseed rape
- Identify floral scent compounds which are relevant to pollinator attraction

In Oilseed Rape there's an

18% increase in seed set when plants are pollinated in the field by insects.

Which equates to a

20% increase in market value.

SCAN FOR MORE INFO