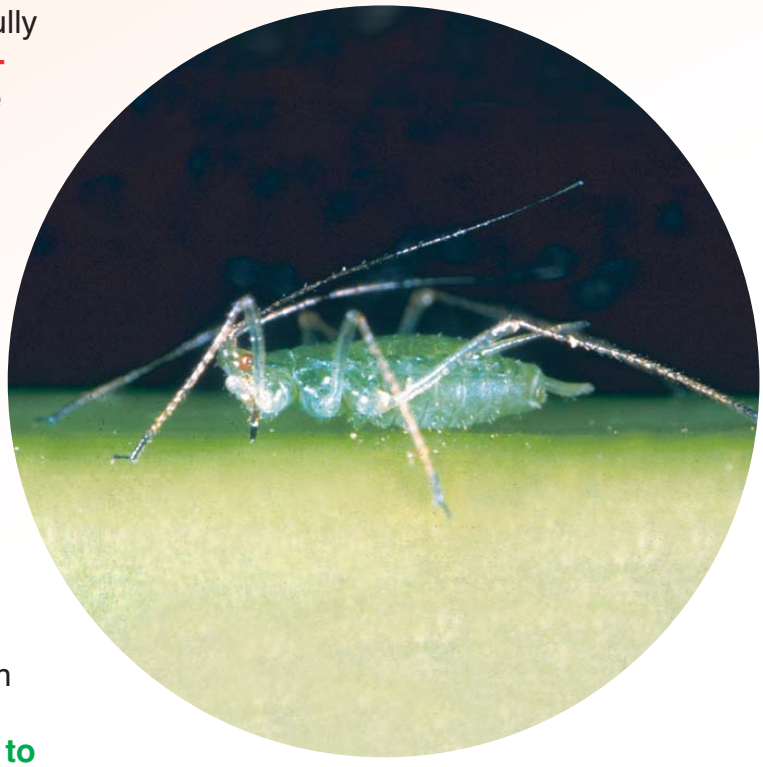
Breeding crops with built-in pest resistance:

The co-evolutionary battle between raspberries and virus-transmitting aphids.



- SCRI scientists have successfully bred several varieties of **aphid-resistant raspberries** over the last 30 years (e.g. **Glen Prosen, Glen Moy, Glen Rosa**).
- Unfortunately, pests like raspberry aphid (a vector of 4 plant viruses causing serious diseases in the crop) have adapted to the genetic pest resistance introduced by plant breeders.
- The timescales in this 'co-evolutionary battle' are tipped in favour of the pest: **It takes breeders more than 10 years to breed a new type of aphid-resistant raspberry. However, raspberry aphid can now overcome single resistance genes in less than 10 years!**
- This means we have to change the way we breed for resistance to aphids (using **new combinations of resistance genes**) AND we have to use **Integrated Pest Management** to reduce selection pressure for adaptation by the pest population.
- **SCRI scientists work together to devise future crop protection strategies which will be more durable and rely on less pesticides (which are now being banned in UK and Europe).**

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