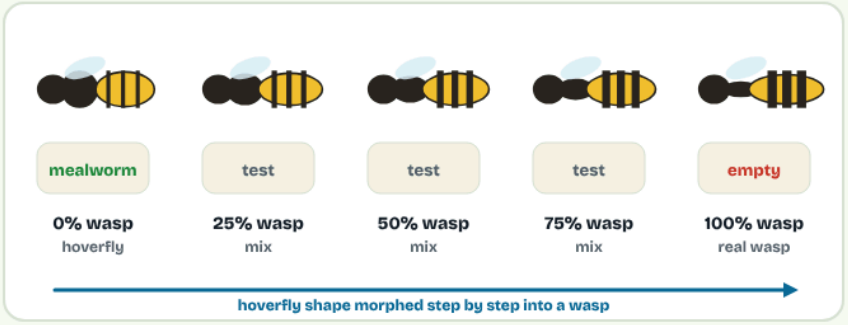
That is why

Why do hoverflies look like wasps?

Harmless flies wear the wasp's warning stripes. How good the costume must be depends on who is watching.

A The bird test: 3D-printed insects

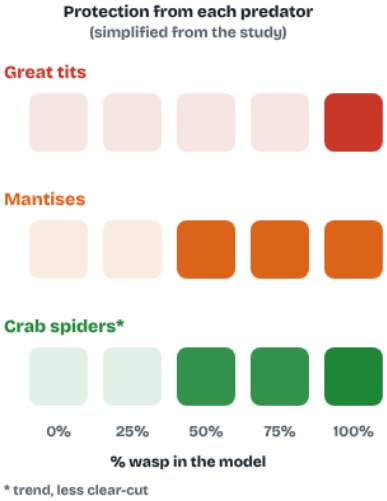


Wild great tits, Madingley Wood, England

Fly lids hid a mealworm, wasp lids nothing. After about 10 days, the birds told every mimic apart from the wasp, even the best one. Color and size mattered more than pattern or shape.

Models simplified. In the study, insects were scanned and 3D printed.

B It depends who's watching



1 Half a costume

can be enough for some.

C More clues

1 Bigger, better

Larger hoverflies are better mimics: they're worth a closer look.

2 Acting the part

Of 57 species, 6 wagged wings, fake-stung and waved legs: all large wasp mimics.

3 No sting at all

Flies have 2 wings, bees 4. Buzzing like a wasp: "weak at best."

The wasp earns the warning. The hoverfly just wears it.

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Diagram: https://thatiswhy.com/diagrams/why-hoverflies-look-like-wasps/ · Full guide: https://thatiswhy.com/why-hoverflies-look-like-wasps/