

Butterfly legs 'taste' plants for egg laying: study

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Swallowtail butterflies copulate in the branch of a tree in Pinamar in 2008. A species of butterfly uses its legs to taste plants to see which leaves offer its eggs the best chance of survival, Japanese scientists said Wednesday.

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A group of researchers say they have shown for the first time that swallowtail butterflies have an array of sensors on their forelegs that allow them to get a flavour of the leaves they land on.

The team, led by scientists at Osaka-based JT Biohistory Research Hall, said the larvae of plant-eating insects need specific types of plants to feed on.

They said the female's ability to select the right plant on which to lay her eggs is key to the survival of the [larvae](#) when they hatch.

Scientists said they found that swallowtails lay eggs only when they detect the presence of specific chemicals in the leaf as they drum their forelegs on the surface.

The study casts new light on how different species use chemical detection to boost their chances of survival, the researchers said.

"Our findings open the way to identifying other [receptors](#) (used in the egg laying process) and to gaining a better understanding of the evolution of [host plant](#) selection by the butterfly," they said in the study, published in the online journal *Nature Communications*.

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