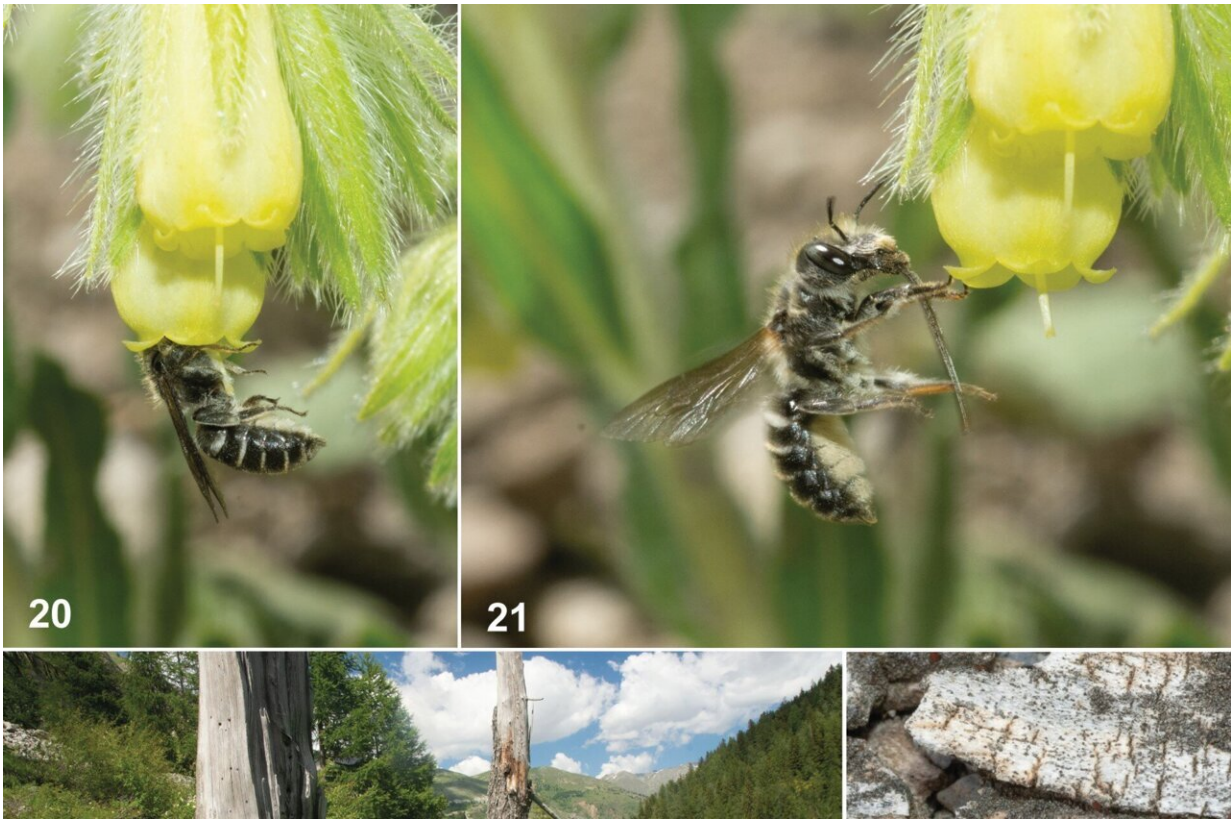


Discovery of rare bee species links the French Alps to remote regions in Turkey and Iraq

March 25 2024

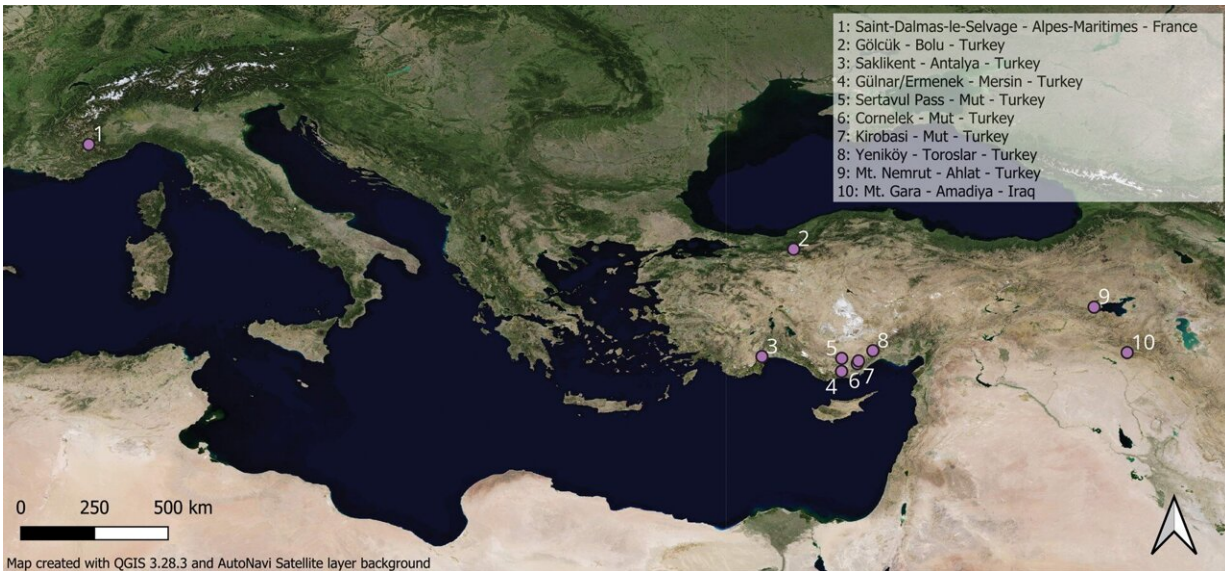


Hoplitis onosmaevae behaviour and habitat. Credit: *Alpine Entomology* (2024).
DOI: 10.3897/alpento.8.118039, CC-BY4.0

A team of European researchers have discovered a new species of osmiine bee with an unusual geographic distribution.

Hoplitis onosmaevae is currently found exclusively in the Mercantour National Park in the French Alps and disparate mountainous regions in Turkey and Northern Iraq. The distance of more than 2,000 km between these areas highlights a significant biogeographic disjunction.

Described in [an article](#) in the open-access journal *Alpine Entomology*, the new bee species demonstrates unique ecological characteristics such as its distinct nesting behavior in dead wood. Presumed to only harvest pollen from *Onosma* species, it has a long proboscis, which is likely an adaptation to collect nectar from the long-tubed flowers of this genus.



Distribution map of *Hoplitis onosmaevae*. Credit: *Alpine Entomology* (2024). DOI: 10.3897/alpento.8.118039, CC-BY4.0.

The strongly disjunct distribution of *Hoplitis onosmaevae* has important implications for conservation. The species likely has a very narrow [ecological niche](#), making it highly susceptible to future changes in its

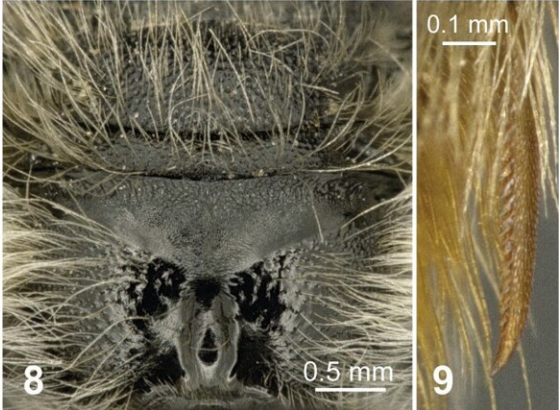
habitats, for example due to changes in [agricultural practices](#) or to [climate change](#).

"The consideration of the few known populations of this species in France is very important in the conservation field," says lead author Matthieu Aubert, freelance entomologist and member of the Observatoire des Abeilles association. "This study highlights the incredible diversity of wild bees and that we still have a lot to learn from our environment, even in western Europe."

The researchers emphasize the need for detailed conservation plans in the southwestern Alps to ensure the survival of *Hoplitis onosmaevae*, considering its highly specialized ecological niche and consequently its vulnerability to habitat changes. Their proposals for initial conservation steps can be found in the full research paper.



Hoplitis onosmaevae, foraging habitat and behaviour. Credit: *Alpine Entomology* (2024). DOI: 10.3897/alpento.8.118039, CC-BY4.0.



Hoplitis onosmaevae female holotype. Credit: *Alpine Entomology* (2024). DOI: 10.3897/alpento.8.118039, CC-BY4.0

More information: Matthieu Aubert et al, A new osmiine bee with a spectacular geographic disjunction: *Hoplitis* (*Hoplitis*) *onosmaevae* sp. nov. (Hymenoptera, Anthophila, Megachilidae), *Alpine Entomology* (2024). [DOI: 10.3897/alpento.8.118039](https://doi.org/10.3897/alpento.8.118039)

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