

The biggest threat to honeybees is not pesticides but Varroa mites — and beekeepers may have accidentally fueled the plague

Propolis is a sticky material that bees make from a mixture of wax and resins gathered from a wide variety of plants. They use it to coat the inner walls of their hives, to plug holes in the hive wall that might otherwise admit predators, and to encase the bodies of those intruders which do manage to breach that wall and have subsequently been stung to death.

Evidence is mounting, however, that propolis serves as more than just a building and embalming material. This evidence indicates that it also has antimicrobial properties which help bees fend off a range of dangerous diseases.

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It seems pretty clear, then, that propolis helps protect against *Varroa* infestations. But this raises the question of why bees do not make more use of it in their brood cells.

A plausible answer is that the ability to do so has been bred out of them.

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Reversing the consequences of such selective breeding will not be easy. It might possibly be done by hybridising domesticated *mellifera* with wild strains of the species, or with other species of *Apis* that have not lost the knack of making propolis.

[This is an excerpt. Read the original post here.](#)