

Repel mosquitoes with a natural oil from health stores



Every summer, mosquitoes force most of us to choose between two less-than-ideal propositions: get eaten alive, or cover ourselves in an insect repellent that likely includes DEET.

DEET-based topical repellents are widely used because DEET has a reputation for being effective. But between its strong chemical smell and the sticky, skin-irritating residue it leaves behind, it's not the most pleasant experience. And though DEET is considered [safe for human use](#), not everyone loves to douse themselves with a [substance known to break down synthetic fabrics](#).

There are plenty of non-DEET options on the shelves, but it's unclear whether natural choices work as well. New research brings some good news — and it involves [patchouli oil](#). Yes, the same scent wafting out of your local health food store is actually effective at repelling mosquitoes.



What the Research Found

A [study](#) published in the journal *ACS Omega* in March [found](#) that **patchouli oil mixed into an unscented lotion** repelled mosquitoes just as effectively as DEET under controlled conditions. A research study confirmed the efficacy of the customized lotion.

The study didn't examine exactly *why* patchouli works, but the researchers theorized that its strong scent may block a mosquito's ability to detect humans, essentially rendering you invisible to bugs.

Other experts say it may be that mosquitoes simply don't care for the oil's smell: "It's an odiferous material that could repel mosquitoes."



How To Make Your Own

Patchouli oil breaks down quickly when exposed to air, which is why the researchers mixed it into a lotion rather than applying it straight. You can do the same at home with any *standard unscented cream*, like CeraVe.

Aim for a [1% solution](#): For every 8 ounces of lotion, add about 2.4 milliliters (roughly half a teaspoon) of patchouli oil. Mix well before applying.

It's possible to be allergic to patchouli oil, so it's important to do a [patch test](#) to see how your skin will react. Apply a small amount of the patchouli lotion to the inside of your elbow twice a day for seven to 10 days. No redness or irritation means you're good to go. If you do get a reaction, though, you should wash the lotion off immediately and not use it again. (Never apply undiluted essential oils to your skin, either; doing so can cause extreme irritation.)

There's also some evidence that patchouli oil [affects blood clotting](#), so don't try this DIY lotion if you have a bleeding disorder, are on blood-clotting medication, or have a major surgery coming up.



Don't Bug Out: A Few Important Caveats

Patchouli hasn't been registered with the EPA as an approved repellent — that requires extensive testing — and this study was conducted under controlled lab conditions, so real-world results may vary.

If you've tried the DIY lotion and are still getting bitten, you may end up grabbing a DEET-based repellent anyway — but there's an interesting wrinkle there, too. A separate study published in the [*Journal of Experimental Biology*](#) found that mosquitoes can actually learn to associate the smell of DEET with food (that's you), meaning that in theory, repeated exposure could make DEET-wearers more attractive to bugs over time. It's kind of like Pavlov's dog, except the dog is a mosquito that wants to bite you.

That said, in parts of the world where mosquito-borne diseases are a serious threat, DEET saves lives, and experts still consider it the gold standard for high-risk situations. For backyard evenings, though, a patchouli lotion will hopefully do the trick.