



Mozzie & Bug Repellent

Add 10 – 15 drops each of the following into 200ml water:

Clary Sage;
Rosemary;
Lavender; and
Thyme.

Add a dash of alcohol.

The “How & Why”

This mixture works as a mild, natural DIY insect repellent spray, particularly against mosquitoes, flies, and some other common bugs. It's a popular homemade approach using essential oils with known repellent properties, diluted in water with a bit of alcohol for better mixing and preservation.

How Each Ingredient Contributes

- **Water:** Serves as the main carrier/base for a sprayable liquid. It dilutes everything for safe skin application but doesn't repel insects itself. Use distilled water to avoid impurities or bacterial growth.
- **Clary Sage Essential Oil:** Shows repellent effects against various pests, including fruit flies (like *Drosophila suzukii*), stored-product beetles, and some mosquitoes. It works in a dose-dependent way and has broader pesticidal properties.
- **Rosemary Essential Oil:** One of the stronger options here. It repels mosquitoes effectively (e.g., 20% solutions offering hours of protection in studies) and works against other insects due to compounds like cineole and camphor. Many commercial natural repellents include it.
- **Lavender Essential Oil:** Repels moths, ants, fleas, and some mosquitoes. It provides a pleasant scent while contributing to the blend's overall deterrent effect, though it's generally milder on its own.
- **Thyme Essential Oil:** Among the more potent in the mix. Thymol and other compounds give strong mosquito repellency (up to 91% in some tests) and effectiveness against flies and ticks. It often outperforms other oils in duration.
- **Dash of Alcohol** (e.g., vodka, witch hazel, or high-proof ethanol): Acts as an **emulsifier** to help disperse the oils in water (essential oils don't mix well with water alone). It also serves as a mild preservative to extend shelf life and helps the spray dry faster on skin without feeling too greasy.

Together, these create a synergistic herbal scent that many insects find unappealing or masking to human attractants (like CO2 and sweat). The blend smells pleasant to most people—floral, herbal, and fresh.





Expected Effectiveness

- **It can provide short-term repellency** (often 1–4 hours, depending on concentration, bug type, humidity, and activity). Reapply frequently, especially after sweating or swimming.
- Stronger against mosquitoes, flies, and some garden pests than others (e.g., ticks may need higher concentrations).

