

THE MYTH OF MOSQUITO REPELLING PLANTS

Citronella geranium, lemongrass, basil, catnip, peppermint, rosemary, lavender and many more aromatic plants are touted to repel mosquitoes according to online searches, garden centers and plant tags. For natural mosquito control, home gardeners plant these sweet-smelling annuals around porches and decks thinking they'll have a bite-free summer.

Unfortunately, there is no scientific evidence to prove aromatic plants repel mosquitoes. Each of these plants and others do have essential oils with properties that have been scientifically proven to repel mosquitoes; however, it's the oily residue from crushed flowers or leaves directly applied to the skin that repels, not the breeze sending the scent adrift. The scent from the potted plant simply dissipates into the air.

In Michigan, one of the most common biting insects that can also spread disease is the mosquito. Interestingly, male mosquitoes prefer nectar and are considered pollinators. Female mosquitoes also feed on nectar, but they are on a mission for the iron, amino acids and protein in blood to feed their eggs. Can porch boxes, deck gardens and borders be planted to attract insects who eat mosquitoes? Or can certain plant colors keep mosquitoes away? Maybe.

Michigan is home to around 150 species of dragonflies and damselflies that prefer mosquitoes, gnats and flies in their diet. Dragonflies and



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damselflies are typically active during the day but do feed on mosquitoes, which are active at dawn and dusk. Due to dehydration, mosquitoes avoid flying during hot and sunny daytime and instead, hang out in cool damp places like under porches and dark foliage.

Researchers from the University of Washington recently discovered a common mosquito species "sees" the smell of CO2 (human breath) and human skin as orange-red. Mosquitoes are not only attracted to CO2, but also to warm and sweaty skin and will investigate orange, red, black and cyan (blue-green) in their view as possible hosts. The researchers noted that mosquitoes didn't fly toward and investigate green, purple, blue and white when exposed to CO2. Pinks and yellows weren't mentioned.

Based on the results of this interesting study, there are a few ideas gardeners might want to try but first, let's make sure we cover some basics to keep the blood-thirsty creatures away from guests in outdoor, unscreened entertaining areas:

- Remove all standing water. Stagnant water is a mosquito nursery and eggs can hatch within about 48 hours after being deposited.
- If you have a solar or an electric water feature, check it daily to be sure it's functioning properly and the water is moving. Larvae need calm, stagnant water to thrive.
- Use fans to prevent mosquitoes from biting. They may detect warm skin and CO2, but a fan's turbulence on medium or high settings will prevent the weak fliers from getting to the source.

Here are some ideas to experiment with based on the colors the University of Washington study identified as not attractive to mosquitoes. Keep in mind, mosquito-eating dragonflies and damselflies are attracted to spiky, vertical plants for mating, resting and hunting.

1. Surround your sunny entertaining areas with borders and containers of interesting arrangements of white annuals using tall, short, trailing and full plants such as:
 - o Bioluminescent petunias that are white in daylight with a green glow after dusk
 - o Petunias
 - o Geraniums
 - o Euphorbia
 - o Bacopa
 - o Angelonia
 - o Snapdragons
 - o Moonflower
 - o Zinnias
 - o Sweet alyssum



2. If color is a must-have, definitely avoid what looks like blood to a mosquito — no reds or oranges. Instead, integrate these sun-loving blue and purple annuals along with a few of the white suggestions or create a bluish-purple blend:

- o Salvia
- o Lobelia
- o Larkspur
- o Love-in-a-mist
- o Purple lantana
- o Petunias
- o Ageratum
- o Pansies
- o Lavender

If the goal is to naturally avoid a mosquito bite while enjoying the unscreened outdoors, rethink your surroundings. Incorporating a few changes to the landscape around the outdoor entertainment spaces might just be what's needed to be able to relax without a coating of bug spray. At least it's worth a try. □

