

Did You Know?



Uninvited guests can ruin a festive cookout and other outdoor activities, especially if they happen to be those that bite you.

Mosquitoes are more than an aggravation to billions of people worldwide. They can transmit dreadful diseases like malaria, yellow fever and West Nile virus. That's one reason why ARS scientists are looking for new and effective repellents to ward off these party crashers.

Did you know that ARS scientists in Beltsville, MD, have isolated a compound from the Tauroniro tree of South America that deters mosquito biting? The compound also can be prepared from pine oil and has been shown to be more effective in preventing mosquito biting than the widely used repellent DEET.

A mosquito-repelling folk remedy handed down through generations has led ARS scientists in Oxford, MS, to the American beautyberry plant. Compounds isolated from crushed leaves of the plant have proven to be effective repellents.

Compounds from both pine oil and the American beautyberry also repel ticks. One species—the blacklegged tick—is the primary carrier of the bacteria that cause Lyme disease in humans. If left untreated, Lyme disease can lead to severe and chronic illness.

In addition to finding natural compounds that help prevent mosquito attacks, ARS scientists in Gainesville, FL, have collaborated with University of Florida researchers to develop a computer modeling program that analyzes chemical structures of selected compounds and predicts those that are likely to prevent mosquitoes from biting. This computer program may streamline the process of testing new active ingredients of repellents, leading to longer lasting products in the future.

So beware, bugs!

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