Evaluation of Novel Release Device of Repellents for the ACP

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Volatiles from botanical oils have been found to discourage ACP feeding on citrus. These may provide a safe and efficient alternative for the management of the psyllids and help reduce the number of yearly chemical applications. The goal of this project is to evaluate the repellency of a cost-effective odorant delivery device for botanical oil volatiles, which include cinnamon, peppermint, fir oil, and blends of these at various rates. Laboratory olfactometer experiments were conducted to evaluate the odorants. Initial results indicate that treatments containing Siberian Fir oil at a 20% rate have the highest percentage of psyllid deterrence, while lower rates of the same oil were not as effective. These results suggest that the odorant release device may be a useful tool that can be used towards building a practical integrative pest management (IPM) program for ACP in citrus. Field trials are currently underway in Florida, Texas, and California.

Funding

USDA

HLB Multi Agency Coordination Group