

Abstract

This research aims to reduce the use of agricultural chemicals in highland areas by studying and selecting the active substances for attract thrips. From testing to attracting thrips with fresh French marigolds and fresh chrysanthemum flowers in laboratory, it was found that in the period of 24 hours, French marigold, Gold marigold and purple chrysanthemum flowers could attract thrips at percentage of 50.29, 23.89 and 20.04 % respectively. While dry flower experiments showed that the amount of attracting thrips was lower than 5 %. Then, the fresh French marigolds were analyzed for its chemical composition by Solid Phase Microextraction (SPME) and Gas Chromatography-Mass Spectrometry (GC-MS). Several compounds were found in fresh flower. Mixture of synthetic Sabinene and Caryophyllene (ratio 1:4) attracted thrips with 47.19%. At this stage, it may be conclude that theses two compounds could be developed and showed attraction activity for controlling thrips on highland chrysanthemum.

