

Invasive Species

Interaction of Acetic Acid and Ethanol as Attractants for the Spotted Winged Drosophila, *Drosophila Suzukii*, (Diptera: Drosophilidae)

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Abstract: Recommendations for monitoring Spotted Winged Drosophila (SWD) in the western U.S. and Canada call for the use of vinegar or wine as a bait for traps, which may be due largely to the evaporation of acetic acid and ethanol from those traps. Numbers of both male and female SWD flies in traps baited with a mixture of acetic acid and ethanol were significantly greater than numbers in traps baited with vinegar alone or wine alone. Similarly, traps baited with the combination of vinegar and ethanol captured many more SWD flies than traps with acetic acid, or traps with wine. These results indicate a synergy of the two chemicals, and of the two materials, in attracting SWD. A comparison of acetic acid with ethanol versus vinegar with wine, showed also stronger attraction of the vinegar/wine solution, indicating attractiveness of chemicals in addition to acetic acid and ethanol.