

Headmone 4/1A sprayables 10-40 mg/A 40 labeled
Puffers 15-4/A mg/A

AK SAYS

Codling moth behavior – our last and best chance to understand MD

MD use in orchard
reduces fecundity

→ 78%

Alan Knight

ATTRACT & Kill "LAST CALL"

U.S.D.A., A.R.S., Wapato, WA

Abstract: The use of sex pheromones to disrupt mating (MD) of codling moth (CM) has been rapidly adopted since 1991 and its use now includes 60% of the tree fruit acreage in WA. A large number of studies have been conducted in my laboratory, during the past 10 years, to examine how MD works in an effort to improve its effectiveness. Our major findings have included demonstrations that dispensers need to be placed in the tops of trees to be most effective, demonstrating the success of monitoring orchards with high-load pheromone lures placed in the tops of trees away from dispensers and near the borders of orchards, the relative importance of dispenser density and emission rate on the level of disruption, the importance of false-trail following versus habituation as the major mechanism for MD, revealing that most CM females in MD orchards are mated but that multiple mating of females during the second flight are significantly reduced, demonstrating that delay of mating under MD is an important mechanism affecting population growth of CM, showing that the three component pheromone blend is not more effective than using the single major component, codlemone, and that dispensers emitting a blend of codlemone and its three geometrical isomers are more effective than similar dispensers emitting codlemone in shutting down male catch by virgin female-baited traps.

2 day
delay in
mating
= 45%
Reduction
in
fecundity

NOT density dependent