

Plant Volatiles for codling moth monitoring

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Ethyl (2E,4Z)-2,4-decadienoate, a pear-derived volatile, is highly attractant to Codling moth, *Cydia pomonella* (L.) (Light *et al.*, 2001). Evidence of a dose-response relationship to this volatile has been shown by electroantennographic and wind tunnel studies (De Cristofaro *et al.*, 2002; Tassin *et al.*, 2002); response variation according to the Codling moth population has been reported as well. Comparison of identified kairomonal and pheromonal lures to monitor the seasonal emergence of Codling moth were carried out for three years (2000-2002) on endemic population of apple and pear orchards in different Italian geographical areas.

In the apple orchards kairomone-baited traps detected the first Codling moth flight in a similar way as the pheromone lures. Males and females (virgin and mated) were caught in the kairomone-baited traps, but males were in higher percentage.. Less effective codling moth attraction resulted during the second generation The position on the plant was a critical factor affecting the trap efficiency

In the pear orchards, a lower attractant power was observed during the whole seasonal flight period.

In order to evaluate a probable synergistic effect, the attractancy of pheromone and kairomone blends was also investigated.