

Efficacy of Trap Test Capturing of Chestnut Tortrix Moth (*Pammene fasciana* L., *Cydia fagiglandana* (Zell.) and *Cydia splendana* Hb.) in Central Italy

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Abstract

Many phytophagous are reported to cause damage to chestnut trees (Paparatti et al. 1998, Pollini 1998, Cinti et al. 1995). However a recent survey carried out in Central Italy has identified chestnut weevil (*Curculio elephas* Gyll.; Coleoptera, Curculionidae) and tortrix moths (*Pammene fasciana* L., *Cydia fagiglandana* (Zell.) and *Cydia splendana* Hb.; Lepidoptera, Tortricidae) as the most damaging pests of chestnut fruits (Speranza, 1999). During the last years the damage caused by the over cited insects increased remarkably. In order to have an idea of the flight activity of these pests, it has been decided to investigate the presence of adults of the 3 species of tortrix moths in 3 chestnut orchards in the area of the Monti Cimini, Viterbo (IT). Surveys have been carried out in the period 1997-1998.

In 1997 the flight activity has been checked by the pheromones TRAPTEST® (ISAGRO). In each orchard 3 different Traptest, with specific female sexual pheromones, were randomly placed taking care not to locate them less than 50 m each other and tangent the crown, 2.5 m above the soil. For each TRAPTEST® 3 replicates were used, and pheromones replaced monthly. The number of the adults for each species present in the traps were counted weekly. The attractive efficiency of each specific pheromone has been detected every 4 weeks. In 1998 the research was carried out according to the same design in one of the orchards selected in 1997.

The pheromone used for the Early chestnut tortrix moth (*P. fasciana*) showed a typical decreasing trend from the 1st to the 4th week. An anomalous performance has been noticed for the pheromone used for Intermediate chestnut tortrix moth (*C. fagiglandana*) and Late chestnut tortrix moth (*C. splendana*).

The data obtained pointed out that the commercial formula of female sexual pheromone for Early chestnut tortrix moth is selective and efficient. On the contrary the pheromones for both Intermediate and Late chestnut moths didn't show a clear efficiency to these species as other authors asserted (Rotundo, personal communication).

References

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