

# Identification and Field Bioassays of the Sex Pheromone of the Peach Leafminer, *Lyonetia clerkella*

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The peach leafminer, *Lyonetia clerkella*, is one of major pests in peach orchards in Korea. Larvae of this pest live inside the leaves, so it is difficult to kill them by the spraying of insecticides, thus the timing of sprays is limited to the younger susceptible larvae stage. Pheromone traps are useful to monitor the seasonal occurrence of this pest and to determine the timing of insecticide sprays. We report identification and field tests of sex pheromone component of *L. clerkella*. Extracts of the pheromone glands from female were analyzed by coupled gas chromatographic-electroantennographic detection (GC-EAD). The one compound that elicited response from male antennae was identified as 14-methyl-1-octadecene (14-me-1-18Hy). In field tests, sticky traps baited with synthetic 14-me-1-18Hy alone were highly attractive to male. Increasing the dose of pheromone resulted in increasingly higher trap catches, but there were no significant difference in the numbers of moth caught in traps baited with doses of 0.5 and 1.0 mg. The results of the field assays for longevity of pheromone traps showed that lures remained effective for at least 8 week under field conditions. The attractiveness of 14-me-1-18Hy was not affected by addition of butylated hydroxytoluene (BHT) in lures as an antioxidant. Captures of male *L. clerkella* were not significantly different between delta- and wing-type traps baited with 0.5mg of 14-me-1-18Hy.