

2-2. Assessment of Pheromone Traps for Monitoring and Control of *Helicoverpa assulta* (Lepidoptera: Noctuidae) in Red Pepper Fields

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The oriental tobacco budworm, *Helicoverpa assulta* (Guenee) is one of the major pests of red pepper in Korea. At present, this pest is routinely controlled by frequent use of broad-spectrum insecticides per season. However, the timing of sprays is critical for effective control, because the larvae bore quickly into the fruits soon after hatching. This study was carried out to assess the practical value of pheromone traps for the control of *H. assulta* in red pepper field during 2001 and 2002. The results of pheromone trap catch showed that moth flight activity occurred primarily from late May to early October in Suwon. Peak periods of adult flight, which are indicators of each generation, occurred in late June, late July, and early September, respectively. Insecticide-untreated fields, fruit damage by *H. assulta* larvae was only 0.19% on early July, and then increased to 6.6% on middle August. However, despite the high number of trap catches during the third generation, fruit damage by larvae of this generation was only 1.7%. Five annual sprays of insecticides based on pheromone trap catches were as effective as a conventional preventative spray programs in reducing damage. The present study indicates that pheromone traps can be used successfully to monitor and control the *H. assulta* in red pepper fields.