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2004 Pheromone-trap Detection Survey for Light-brown Apple Moth, *Epiphyas postvittana* (Walker) (Lepidoptera: Tortricidae), an Exotic Pest of Many Crops.

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Background

Native to Europe and Asia, the light-brown apple moth (LBAM) is a highly polyphagous foliage feeder that attacks many ornamental plants as well as grapes, apple, pear, and other fruit trees, damaging leaves and developing fruits (Figures 1, 2). To date LBAM has not been found in continental North America and, as an exotic pest threat to North American agriculture, is regulated by both the USDA and the Canadian Food Inspection Agency.

2004 Project Objective

Conduct pheromone-trap survey of populous western Washington for SFT.

- Place and monitor pheromone-traps in areas of commercial, home orchard, and feral *Malus*, *Pyrus*, and *Prunus* culture.
- Screen and identify captured specimens, including non-target material.

Project Methods and Materials

Three hundred and fifty-seven pheromone-lure baited traps were placed in counties along the Interstate-5 corridor in western Washington, from the Canadian border south to Clark County on the Columbia River / Oregon border (Table 1). Traps were hung in roadside or residential yard trees, primarily in areas where home orchards could provide appropriate hosts.

Trap placement began in June and most traps were removed by the end of August. Traps were checked and pheromone lures changed every two weeks as much as possible during the expected (probable) period of adult flight. Traps with specimens were processed at the Olympia Entomology Lab, where suspect target and non-target specimens present were identified and counted.

Pherocon 2® type traps (a.k.a. "diamond" traps) were used in this survey, baited with pheromone-lures provided by the USDA APHIS Otis Methods Development Center. The PFM pheromone-lures consisted of gray rubber septa (West Co., Lionville, PA, cat. no. 1060-0275), each loaded with the following components:

E,11-14:AC / 0.962mg
E,9,11-14:AC / 0.038mg

Project Results

No LBAM specimens were collected in this survey.

A complete list of non-target species captured in this survey (22 spp. / 10,976 specimens) is available from the author.

Figure 1. Adult Male LBAM



Figure 2. Male Genitalia Characters

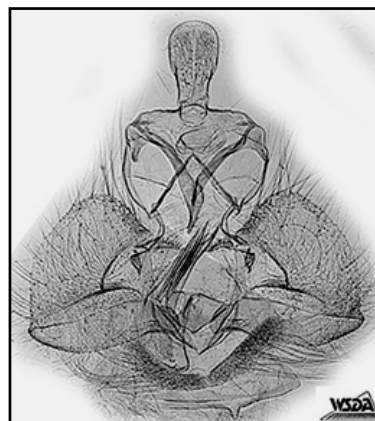


Table 1. LBAM Trap Placement

County	Number of LBAM Trap Sites
Whatcom	51
Skagit	41
Snohomish	39
King	52
Pierce	50
Thurston	41
Lewis	15
Cowlitz	20
Clark	51
Total	360

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