

II Pome Fruits
f. Implementation
Codling moth

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In 1984, most Bartlett pear growers in the Suisun Valley district, Solano County, California experienced economic codling moth damage which rendered the fruit unmarketable. This was due, in part, to the proliferation of abandoned orchards, reduced spray programs in many orchards and a lack of implementation of codling moth monitoring tactics. Those few growers using codling moth traps and phenology considerations reacted with additional pesticide sprays for codling moth and harvested a commercial crop.

As a result of this experience, the Suisun Valley Fruit Growers Association (SVFGA) contracted with Weddle, Hansen & Associates, Inc. to conduct a codling moth monitoring and consulting program for all SVFGA member pear growers (approx. 500 acres). The objective of this program was to assist growers in regaining commercially acceptable control of codling moth and reduce codling moth populations to more easily manageable levels.

A parallel program was conducted by the Solano County Agricultural Commissioners office for non-SVFGA members.

Under the SVFGA program 50-60 plastic IOBC pheromone traps were located in 30 orchards. Traps were monitored weekly from mid-March through August. Growers were notified weekly by mail of their moth counts relative to the weekly average moth counts and control advisories issued.

During the first three years of the program, codling moth trap catches were sufficiently heavy in most orchards to require applications of standard rates of Guthion or a synthetic pyrethroid every 18-21 days during the season. Most orchards received 5-7 pesticide applications during 1985,86,87 growing seasons. This program provided damage levels at or below 5%.

Table 1 shows the relative changes in codling moth trap catches during the 4 years of the program.

Early trapping results in 1988 indicated that area-wide moth populations were declining. SVFGA members controlled these populations with 3-4 pesticide applications and worm damage was below 5%. Further reductions are anticipated for 1989.

**Table 1. Average Codling Moth
per Trap per Year.**

<u>Year</u>	<u>Hi</u>	<u>Lo</u>	<u>Avg.</u>
1985	903	112	438
1986	887	43	299
1987	732	54	321
1988	491	21	167