

<b><i>DESCRIPTION:</i></b>	<b>El Dorado County Pear Pest Management Alliance 2001 Final Report</b>
<b><i>PROJECT LEADER:</i></b>	<b>Randy Hansen, Weddle, Hansen &amp; Associates, Inc.</b>
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**El Dorado County**  
**Pear Pest Management Alliance**  
**2001 Final Report**

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**Participating Growers:** Pat O'Halloran, Byron Sher and Ken Johnson

**Abstract**

In this project, three growers used Codling Moth mating disruption (MD). Two growers (LBS, graph 1 & Apple Trail, graph 2) have used MD since 1999 under this program. An additional grower (Smith Flat) had used MD prior to this season and joined the PPMA program in 2001 to improve his level of understanding and results.

In 1999, sprays were modestly reduced in the two participating blocks (LBS & Apple Trail), then reduced further in the second season. In 2000, both of those blocks were treated only once each with an OP insecticide. The goal in 2001 was to maintain or further reduce OP use in these blocks without sacrificing fruit quality. That 2001 goal was met as one of those blocks (Apple Trail) was treated one time with an OP and the other (LBS) received no insecticides that would impact CM.

The "first year" block had a very high codling moth (CM) population. In 2000, this block did have MD dispensers applied, but there was extensive CM damage. In 2001, MD combined with 3 OP sprays brought CM damage down to 1.5%.

**Background**

Pear growers in the El Dorado district have been slower than other districts to adopt Mating Disruption (MD) based management programs. MD programs are currently used on approximately 10% of the acreage. That number has decreased in recent years. The typical smaller and hilly orchards of El Dorado are less favorable for MD than in other areas.

The main objective of this program is to encourage more widespread use of MD. The program was to grow from 3 blocks to 6 blocks this season. Poor weather during bloom reduced fruit set in three orchards to minimal levels, so they opted out of the program for this season. No other participants were available.

**Results**

Codling Moth trap data is charted below for the 2 third-year blocks (LBS, graph 1 & Apple Trail, graph 2). Since 1998, CM trap catches have decreased by approximately 90% and sprays for CM have been reduced 85%. No CM damage was seen in harvest samples. These two blocks have had little to no CM damage at harvest in 1998 (pre-MD) and in each of the subsequent years using MD.

In the new block, 3 OP sprays were applied. (Non-MD blocks in the area are typically treated 3-4X with Ops). This block had 1.5 % damage from CM at harvest. This was a marked improvement over the previous season.

Psylla and mite populations remained low in the 3<sup>rd</sup> year blocks. Psylla needed to be treated mid-summer in the new block.

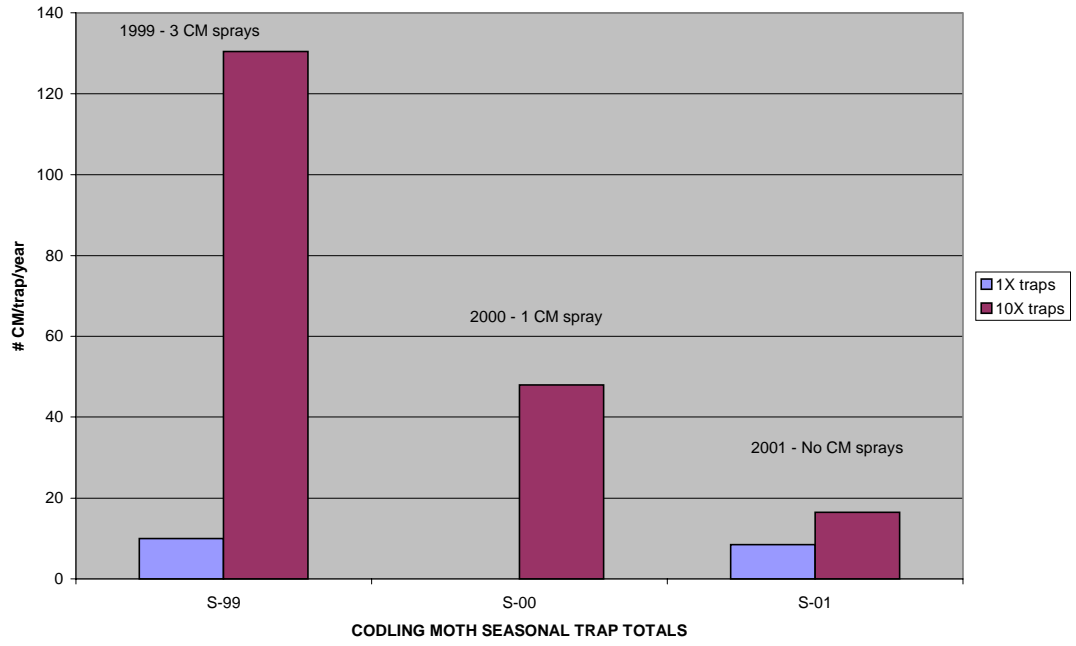
OBLR was also monitored in each orchard (averages shown in graph 3). Overall, populations were similar to 2000. Both the first and second flights occurred earlier this season. There was just under 1% leafroller damage in the 3<sup>rd</sup> year blocks, which were not sprayed the spring. It is not certain if the feeding was from OBLR or other leafroller species.

### **Conclusion**

In orchards with less than ideal situations for Mating Disruption (e.g. small and/or hilly blocks), significant reductions in OP insecticides can still be made with the aid of MD.

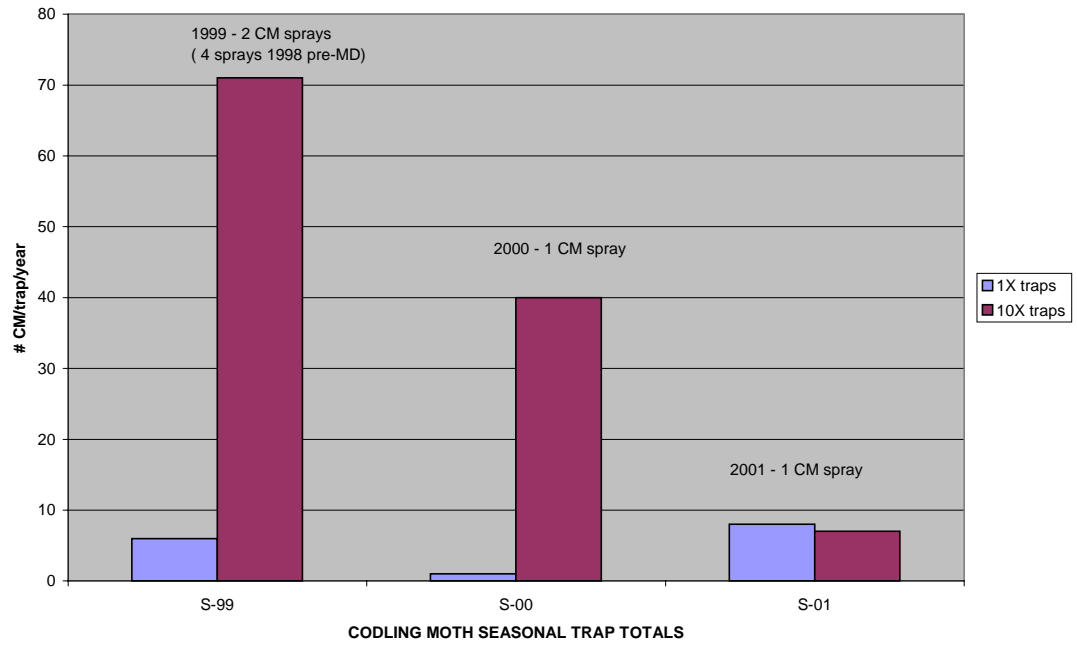
Graph 1

LBS Ranch



Graph 2

Apple Trail Ranch



Graph 3

