

Adapted from: Managing Codling Moth and Oriental Fruit Moth In Apples.  
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 (Recent research may have shifted 2<sup>nd</sup> generation timings, more on that later.)

**Table 1. Codling moth degree-day model and insecticide timings for control.**

GDD° base 50 (Post Biofix)	Event	Action
Pink bud	Development of overwintering larvae.	Set traps.
0 GDD° = Biofix (~200 DD° after Jan 1)	1 <sup>st</sup> sustained moth captures	Set DD° = 0
100 GDD°	1 <sup>st</sup> generation egg laying (oviposition).	Timing for ovicide materials.
250 GDD°	Start of 1 <sup>st</sup> generation egg hatch.	Timing for larvacide materials.
350 GDD°	1 <sup>st</sup> generation egg laying & hatch.	Delayed timing if pest pressure is low, or for 2nd treatment if an ovicide was applied at 100 DD°.
500-650 GDD°	Peak of 1 <sup>st</sup> generation egg hatch.	Timing for additional larvacide if monitoring of CM activity indicates a treatment is needed.
1260 GDD°	Start of 2 <sup>nd</sup> generation egg hatch	Timing for additional larvacide if monitoring of CM activity indicates a treatment is needed.

**Table 2. Chemical class, activity and timing of insecticides used for CM control. (Wise, MSU)**

Compound trade name	Chemical class	Life-stage activity	Optimal spray timing for codling moth	Activity: best = 3 good = 2 some = 1
Asana, Warrior, Danitol, Decis, Baythroid XL	Pyrethroids	Eggs, Larvae, Adults	Biofix + 250 DD	2
Rimon	IGR (chitin inhibitor)	Eggs, Larvae	Biofix + 100 DD Residue under eggs	3
Delegate	Spinosyn	Larvae	Biofix + 250 DD	3
Altacor, Exirel, Verdepryn		Eggs, Larvae	Biofix + 200-250 DD	3
Assail,	Neonicotinoid	Larvae, Eggs & Adults (limited)	Biofix + 200-250 DD Residue over eggs	3
Intrepid	IGR (MAC)	Eggs, Larvae, Adults(sublethal)	Biofix + 150-200 DD Residue over eggs	2
Avaunt	Oxidiazine	Larvae	Biofix + 250 DD	2
Esteem	IGR (juvenoid)	Eggs, Larvae	Biofix + 100 DD Residue under eggs	2
Proclaim	Avermectin	1 <sup>st</sup> generation larvae	Biofix + 200-250 DD	2
Granulovirus	Biopesticide	Eggs, Larvae	Biofix + 250 DD Residue over eggs	2
Voliam Xpress	Diamide + Pyrethroid	Eggs, Larvae	Biofix + 200-250 DD Residue over eggs	3