

Codling Moth Management Recommendations, 2017

(based on degree-day (DD) accumulations from biofix and percent egg hatch)

DD-based timing recommendations following table
are based on complete sprays

Date	Frederick		Rockingham		Rappahannock/Madison		Nelson/Albemarle		Patrick/Carroll	
	Biofix on April 21		Biofix on April 21		Biofix on April 21		Biofix on April 18		Biofix on April 21	
	DD	% egg hatch	DD	% egg hatch	DD	% egg hatch	DD	% egg hatch	DD	% egg hatch
24-Apr	35	0	34	0	39	0	77	0	42	0
27-Apr	58	0	61	0	70	0	111	0	77	0
1-May	158	0	129	0	166	0	210	0	162	0
4-May	190	0	180	0	203	0	247	3	188	0
8-May	211	0	200	0	230	2	277	6	224	1
11-May	237	2	223	1	253	3	307	10	246	3
15-May	256	4	246	6	281	6	343	17	318	12
18-May	335	15	305	10	343	17	411	33	384	26
22-May	401	30	373	23	416	34	491	52	467	46
25-May	433	38	400	30	448	42	525	59	502	54
29-May	499	54	461	45	514	57	602	73	579	70
1-Jun	547	63	511	56	568	67	663	82	636	79
6-Jun	654	81	592	72	659	82	762	90	734	88
8-Jun	676	84	613	75	685	85	790	92	766	91
12-Jun	775	91	697	85	774	91	878	96	847	95
15-Jun	859	95	768	91	851	95	959	99	921	98
19-Jun	977	100	872	96	962	100	1065	100	1019	100
22-Jun	1047	100	943	99	1041	100	1144	2	1037	100
26-Jun	1135	2	1031	100	1137	2	1244	5	1178	2
29-Jun	1198	3	1083	100	1198	3	1302	10	1228	4
4-Jul	1339	12	1214	4	1338	12	1440	27	1335	12
6-Jul	1391	19	1263	7	1388	19	1494	35	1409	21
10-Jul	1490	35	1359	15	1496	35	1602	53	1512	38
13-Jul	1582	50	1434	26	1582	50	1691	68	1596	52

Date	Frederick		Rockingham		Rappahannock/Madison		Nelson/Albemarle		Patrick/Carroll	
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	DD	% egg hatch	DD	% egg hatch	DD	% egg hatch	DD	% egg hatch	DD	% egg hatch
17-Jul	1689	69	1542	43	1696	68	1808	82	1704	69
20-Jul	1779	79	1625	57	1785	80	1897	89	1784	79
24-Jul	1897	89	1739	74	1907	90	2019	96	1904	89
27-Jul	1967	93	1806	82	1978	94	2098	99	1982	94
31-Jul	2046	97	1884	88	2064	97	2188	2	2070	98
3-Aug	2127	100	1956	93	2142	100	2264	5	2137	100
7-Aug	2220	3	2035	97	2229	3	2356	12	2223	3
10-Aug	2283	7	2092	99	2293	7	2423	18	2288	7
14-Aug	2371	13	2179	2	2383	14	2521	29	2384	14
17-Aug	2453	21	2247	4	2458	22	2602	>37	2464	22
21-Aug	2560	35	2356	15	2572	36			2576	37
24-Aug	2642	>37	2423	18	2645	>37			2651	>37
29-Aug			2502	27						
1-Sep			2580	>37						

Estimated percent egg hatch based on accumulated DD from biofix (base temperature of 50°F; Washington State CM model) State model). SkyBit subscriptions for Rockingham, Rappahannock/Madison, Nelson/Albemarle, and Patrick/Carroll counties are supported by the Virginia Apple Research Program (VARP)

Pink Cells

Mating disruption for CM can be initiated during bloom using hand-placed pheromone dispensers and will provide different lengths of protection, depending upon formulation used (see labels). Formulations for simultaneous control of CM and OFM are also available.

Blue Cells

Prepare to control 1st brood CM larvae. Sprays targeting CM larvae are warranted if moth captures in pheromone traps exceed the threshold of 5 moths/trap/week. If captures do not exceed this threshold leading up to the first spray against CM, the application can be delayed to target the middle of 1st brood egg hatch.

Suggested insecticides : Rimon (50 - 150 DD, then at 400 DD); Assail, Belay, Calypso or Esteem (150 DD, then at 450 DD);

Altacor, Belt, CM virus, Delegate, Exirel, Imidan, Lannate, Minecto Pro or Voliam Flexi (250 DD, then at 550 DD). Some of these products will not control other key pests.

Orange Cells

Prepare to control 2nd brood CM larvae if captures exceed 5 moths/trap/week.

Suggested insecticides : Rimon (1050 - 1150 DD, then at 1450 DD); Assail, Belay, Calypso or Esteem (1150 DD, then at 1450 - 1500 DD); Altacor, Besiege, Belt, CM virus, Delegate, Exirel, Imidan, Lannate, pyrethroids, or Voliam Flexi (1250 DD, then at 1550 - 1600 DD). Suggestion of pyrethroids or combination products containing a pyrethroid post-bloom is based on the threat from brown marmorated stink bug. Their use may flare secondary pests. Some of these products will not control other key pests.

Purple Cells

Indicates onset of third CM flight. Third brood larvae often do not complete development to the moth stage, but can cause significant injury late in the season. Use a trap threshold of >5 moths/trap/week to initiate control within 5-7 days.

Suggested insecticides : Assail, Belay, Calypso or Rimon (2180 - 2200 DD); Altacor, Besiege, Belt, CM virus, Delegate, Exirel, Imidan, Lannate, pyrethroids, or Voliam Flexi (2270 - 2330 DD). Additional complete sprays after 14 days or alternate-row-middle sprays at about 7-day intervals may be required if moth captures continue to exceed threshold. Suggestion of pyrethroids or combination products containing a pyrethroid post-bloom is based on the threat from brown marmorated stink bug. Their use may flare secondary pests.

Note: Preharvest intervals now become an important consideration for some varieties.

