

Spotted Wing Drosophila (SWD) Monitoring Report for Southern Interior Valleys of British Columbia 2016

The SWD project ended in 2015 but due to many requests about SWD numbers, we are providing a summary of SWD captures from BC Tree Fruits, research and consultant traps. Adult flies are being monitored mainly with trappit globe traps baited with Trece lures, and a few Scentry baited traps.

SWD numbers are low compared to numbers recorded during the same period in 2015. Flies emerged earlier but numbers have been a bit low and variable probably due to unpredictable weather conditions and good spray programs.

Protect susceptible fruit. Use recommended products and tighten up spray intervals close to harvest.

April 25 – July 4, 2016

Our earliest confirmed SWD flies were collected between March 29 - April 7, 2016 by Dr. Howard Thistlewood, Summerland Research and Development Centre.

See tables 1-4 for SWD captures from packinghouse, research and consultant traps.

SWD Control Products

Protect fruit when they start turning colour and continue coverage until harvest. Registered SWD control products are **Delegate, Entrust, Exirel, Malathion 85E, Mako (formerly Ripcord) and Imidan** (Imidan is not registered for sweet cherries). Entrust can be used by organic growers. These products will only control adult SWD, not larvae. Diazinon used for cherry fruit fly control will also control spotted wing drosophila.

Admire, Assail, Sevin and GF-120 used for cherry fruit fly control will NOT control SWD.

Postharvest sprays

Apply postharvest insecticide sprays to cherries for cherry fruit fly control immediately after harvest. Apply Admire in Lapins, Sweetheart, Sonata and Satin. Dimethoate works well for other varieties and will also control SWD.

Emergency registration labels: [2016 SWD Emergency Registrations](#)

Management recommendations:

[Tree Fruit and Grapes](#)

[Berries](#)

Monitoring and Data Collection by:

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Table 1. 2016 SWD Trap captures for Southern Interior BC (Packinghouse traps).

Area	# of traps	Number of SWD																			
		April 25- May 2		May 2-9		May 9-16		May 16-23		May 23-30		May 30 -June 6		June 6-13		June 13-20		June 20-27		June 27-July 4	
		Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD	Total SWD	Average SWD
Oliver	3	0	0	0	0	0	0	1	0.33	0	0	0	0	2	0.67	0	0	0	0	0	0
Osoyoos	4	0	0	1	0.25	0	0	0	0	0	0	0	0	1	0.25	0	0	0	0	0	0
Cawston	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Keremeos	2	0	0	1	0.5	0	0	1	0.5	0	0	0	0	0	0	0	0	0	0	2	1
Summerland	3	0	0	1	0.33	0	0	1	0.33	0	0	2	0.67	0	0	0	0	0	0	2	0.667
Naramata	3	0	0	0	0	1	0.33	0	0	0	0	3	1	0	0	0	0	0	0	1	0.333
Penticton	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Kelowna	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.25	0	0
Rutland	2	1	0.5	1	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Belgo	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
West Bank	5	0	0	0	0	1	0.2	1	0.2	1	0.2	10	2	10	2	1	0.2	16	3.2	0	0
Peachland	2	0	0	0	0	0	0	1	0.5	1	0.5	9	4.5	15	7.5	0	0	3	1.5	0	0
Mission	4	0	0	0	0	2	0.5	3	0.75	3	0.75	4	1	9	2.25	1	0.25	1	0.25	3	1.5
Ellison	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glenmore	1	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Carr's Landing	2	0	0	0	0	1	0.5	1	0.5	2	1	0	0	0	0	0	0	0	0	0	0
Winfield	2	0	0	0	0	0	0	0	0	1	0.5	0	0	0	0	0	0	0	0	0	0
Oyama	2	0	0	0	0	0	0	1	0.5	1	0.5	2	1	0	0	0	0	0	0	1	0.5
Vernon Bx	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Bella Vista	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lavington	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	46	1		4		6		11		11		30		37		2		21		9	
SWD/Trap (2016)		0.029		0.093		0.133		0.239		0.239		0.652		0.804		0.043		0.457		0.220	
Ratio Male/Female		0:1		2:2		3:3		3:8		3:8		14:16		21:16		1:1		14:7			

Table 2. Comparison of average SWD trap captures (2010-2016)

Year	Average number of SWD									
	April 25-May 2	May 2-9	May 9-16	May 16-23	May 23-30	May 30-June 6	June 6- 13	June 13-20	June 20-27	June 27-July 4
2016	0.029	0.093	0.133	0.239	0.239	0.652	0.804	0.043	0.457	0.220
2015	0	0	0.333	2.247	8.852	14.477	7.057	11.75	12.932	13.773
2014	0	0	0.092	0.092	0.065	0.114	0.032	0.104	0.135	0.223
2013	0	0	0.27	0.27	0.16	0.16	1.75	0.67	0.18	0.1
2012	0	0	0.005	0.01	0.005	0.034	0.01	0.058	0.034	0.034
2011	0	0	0	0	0	0.01	0.01	0.005	0	0.005
2010	0	0	0	0	0	0	0.005	0.01	0.05	0.07

Note: We used deli cup traps baited with apple cider vinegar for monitoring SWD from 2010 – 2013 and a combination of trap types (deli cup and trappit globe) and baits (apple cider vinegar, Trece and Cha-Landolt lures) in 2014. Trappit globe traps baited with Trece/Scentry lures were used in 2015, and we are using mainly Trece baited and a few Scentry baited trappit globe traps in 2016.

Table 3. Weekly SWD trap captures, Summerland Research and Development Center, 2016 (Dr. Howard Thistlewood)

	19-Mar	26-Mar	02-Apr	09-Apr	16-Apr	23-Apr	30-Apr	07-May	14-May	21-May	28-May	04-Jun	11-Jun	18-Jun	25-Jun	02-Jul
Male	0	0	0	2	3	0	0	0	3	5	1	1	9	12	4	1
Female	0	0	0	2	4	0	1	0	0	4	0	0	17	11	4	4
Total SWD	0	0	0	4	7	0	1	0	3	9	1	1	26	23	8	5
Number of traps	12	12	12	12	12	12	29	29	29	29	28	29	29	27	27	27
Average SWD	0	0	0	0.333	0.583	0	0.034	0	0.103	0.310	0.036	0.034	0.897	0.852	0.296	0.185

Note: Flies are being monitored with Trece baited trappit globe traps in sweet cherries and non-crop hosts.

Table 4. SWD trap captures, 2016, Diane Thomas, Okanagan Clean Harvest Consulting

	Oyama													
	Mar 5-April 10	April 10-21	April 21-May 2	May 2-11	May 11-19	May 19-31	May 31- June 2	June 2-9	June 9-16	June 16-23	June 23-30	June 30-July 7	July 7-14	
Male	0	0	0	0	0	0	0	0	0	0	0	0	0	
Female	0	1	0	1	1	2	2	0	0	0	0	4	0	
Total SWD	0	1	0	1	1	2	2	0	0	0	0	4	0	
Number of traps	4	4	4	4	4	4	4	8	8	8	8	4	4	
	Winfield													
	Mar 5-April 10	April 10-21	April 21-May 2	May 2-11	May 11-19	May 19-31	May 31- June 2	June 2-9	June 9-16	June 16-23	June 23-30	June 30-July 7	July 7-14	
Male	0	0	0	0	0	0	0	0	0	0	0	0	0	
Female	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total SWD	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of traps	1	1	1	1	1	1	1	6	6	6	6	1	1	
	Glenmore													
	June 2-9	June 9-16	June 16-23	June 23-30										
Male	0	0	0	0										
Female	0	0	0	0										
Total SWD	0	0	0	0										
Number of traps	1	1	1	1										

Note: Flies are being monitored with traps baited with Cowle’s bait (a mixture of apple cider vinegar, water, yeast, and whole wheat flour) in commercial soft fruit.