

Spotted Wing Drosophila (SWD) Monitoring Report for Southern Interior Valleys of British Columbia (2011)

More than 180 traps have been set up throughout the Okanagan, Similkameen and Creston Valleys in cherries and other stone fruit, berries and grapes.

September 15 – 21, 2011

Confirmed SWD captures from Packinghouse traps:

Area	Crop	Male	Female
Oyama	Cherry	1	0
Oyama	Cherry	1	0
Oyama	Peach	1	2
Oyama	Peach	2	1
Carrs Landing	Cherry	1	1
Carrs Landing	Blackberry	8	8
Carrs Landing	Cherry	42	30
Winfield	Cherry	0	1
Winfield	Grape	1	2
Winfield	Blackberry	3	3
Winfield	Peach	15	8
Ellison	Cherry	1	0
Glenmore	Cherry	1	0
Rutland	Cherry	2	0
Belgo	Grape	0	1
Belgo	Cherry	1	1
Belgo	Grape	2	0
Belgo	Cherry	4	2
Belgo	Blackberry	5	4
E Kelowna	Cherry	1	0
SE Kelowna	Cherry	3	6
Mission	Park	0	1
Mission	Cherry	4	0
Mission	Grape	7	11
Summerland	Cherry	0	1
Summerland	Cherry	0	3
Summerland	Cherry	1	0
Summerland	Cherry	1	2
Summerland	Peach	1	2
Summerland	Cherry	3	1

Summerland	Cherry	14	2
Naramata	Cherry	2	2
Naramata	Cherry	3	2
Naramata	Cherry	4	3
Naramata	Cherry	9	1
Naramata	Cherry	9	9
Penticton	Cherry	1	0
Penticton	Cherry	1	0
Penticton	Cherry	1	2
Penticton	Peach	7	4

Confirmed SWD captures from research/consultant traps:

PARC Summerland, research traps (H. Thistlewood)

3 males and 3 females, sweet cherry block

1 male, sour cherry

1 female, choke cherry

4 males and 2 females, Saskatoons

1 male, currant

2 male and 2 females, hawthorn

1 male, barberry, PARC Ornamental gardens

1 female, dogwood bush, PARC Ornamental gardens

1 female, sweet cherry block

2 females and 1 male, apricot block

1 female, chokecherry, Summerland

1 female from Mahaleb cherry near a cherry orchard, Summerland

4 males and 5 females from Mahaleb cherry adjacent to an orchard, Summerland

6 males and 17 females, Saktoons, Penticton

6 males and 2 females, homeowner's sweet cherry trees, Penticton

1 male and 4 females, currant, Penticton

4 females, mulberry tree, Penticton

1 female from a cherry orchard, Winfield (Diane Thomas)

22 males and 9 females, Oliver (Tamara Richardson)

2 females, Cawston (Tamara Richardson)

18 males and 3 females, mulberry, Mission

2 females, wine grapes, SE Kelowna

1 female, wine grapes, SE Kelowna

1 male, wine grapes, Mission

2 females, wine grapes, Mission

1 male and 1 female, wine grapes, Carrs Landing

1 male and 1 female, wine grapes, Carrs Landing

SWD has been found in all regions except in Creston.

SWD NUMBERS ARE INCREASING. PROTECT VULNERABLE CROPS!!!

Registered SWD control products are Delegate, Entrust, Malathion and Ripcord.

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

See <http://www.agf.gov.bc.ca/cropprot/swd.pdf> for management recommendations for tree fruit and grapes. Please read and follow label directions. Emergency registration labels are posted at http://www.al.gov.bc.ca/pesticides/k_4.htm#2

Management recommendations for berries:

http://www.agf.gov.bc.ca/cropprot/swd_management.pdf

Postharvest sprays

Apply post harvest insecticide sprays to cherries for cherry fruit fly control after harvest. This will also help control spotted wing drosophila and help reduce population levels and spread of flies into other ripening fruit. Dimethoate (not on Lapins), Admire, or Delegate is recommended.

Postharvest clean-up

Spotted wing drosophila will survive and breed in unharvested fruit and cull piles and spread to other ripening fruit. The following practices are recommended to help minimize the build up of spotted wing drosophila populations:

- Pick crops clean. Try not to leave any fruit in the orchard after harvest.
- Use post-harvest sprays immediately after harvest, particularly on cherries or berries that are difficult to pick clean.
- Manage cull fruit daily by one of the following methods:

- Seal fruit in plastic bags.
- Solarize fruit by sealing in plastic bags or cover cull piles with plastic, seal the edges and allow to heat in the sun for a week.

Spotted Wing Drosophila Monitoring Results for Soft Fruit and Grapes (2011) – Packinghouse traps

Area	# of Traps in Area (Sept 15 - 21)	# of Traps with Positive Captures (Sept 15 - 21)	Number of SWD																
			May 25 - June 1	June 2 - 8	June 9 - 15	June 16 - 22	June 23 - 29	June 30 - July 6	July 7 - 13	July 14 - 20	July 21 - 27	July 28 - Aug 3	Aug 4 - 10	Aug 11 - 17	Aug 18 - 24	Aug 25 - 31	Sept 1 - 7	Sept 8 - 14	Sept 15 - 21
Salmon Arm	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	done	done	done
Vernon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	done
Oyama	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	8	8
Carrs Landing	4	3	0	0	1	0	0	0	0	1	0	0	2	0	7	9	18	75	90
Winfield	5	4	0	0	0	0	0	0	0	0	0	0	1	2	1	1	13	25	33
Ellison	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1
Glenmore	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Rutland	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Belgo	7	5	0	0	0	0	0	0	0	0	0	1	0	2	1	1	2	15	20
East Kelowna	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	1
SE Kelowna	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2	4	9	2	9
Mission	6	3	0	0	0	0	0	1	1	1	0	0	0	3	6	22	9	11	23
West Kelowna	0	0	0	0	0	0	0	0	0	0	0	1	0	1	10	8	9	done	done
Peachland	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	done	done
Summerland	11	7	0	0	0	1	0	0	0	0	0	0	0	1	5	6	37	62	31
Naramata	5	5	0	0	0	0	0	0	0	0	0	0	0	4	14	6	75	55	44
Penticton	4	4	0	0	0	0	0	0	0	0	1	0	0	0	2	1	8	4	16
Oliver (N of Road 9)	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	2	18	18	done
Oliver (S of Road 9)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	5	4	done
Keremeos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	12	done	done
Cawston	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	22	done	done
Osoyoos	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	5	done
Creston	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	66	40	0	2	2	1	0	1	1	2	2	3	3	18	54	76	255	286	279
SWD/Trap				0.01	0.01	0.005	0	0.005	0.005	0.01	0.01	0.017	0.017	0.1	0.3	0.4	1.45	2.83	4.23
Ratio Male/Female				2:0	1:1	0:1	0	0:1	1:0	1:1	2:0	2:1	2:1	10:8	33:21	41:35	135:120	203:83	163:116
Percent females				0	50	100	0	100	100	50	50	33	33	44	39	46	47	29	42
2010 Summary																			
SWD/Trap			0	0	0.005	0.01	0.05	0.07	0.11	0.31	0.45	0.4	0.38	0.69	1.72	3.84	3.31	5.42	4.6

Note: Trap captures from consultant/research traps are not included in the above table. Only data from confirmed trap captures have been reported.

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Spotted wing drosophila adult male
Photo credit: S. Fitzpatrick



Spotted wing drosophila adult female
Photo credit: S. Fitzpatrick



Spotted wing drosophila damage to cherries