

## Brown Marmorated Stink Bug (BMSB) Monitoring in Southern Interior B.C. 2019

September 20, 2019

### Monitoring

150 traps were set up to monitor brown marmorated stink bugs in residential areas and a few orchards in the Okanagan, Similkameen and Creston valleys in 2019.

BMSB has been detected in **Kelowna, West Kelowna, Glenmore, Winfield, Vernon, Salmon Arm** and **Osoyoos** this season. With the exception of 2 orchard sites, all detection sites are residential. 97% of the BMSB trap captures are from Central (downtown) Kelowna (see tables 1&2 for regional and Central Kelowna trap captures).

In 2018, BMSB was detected in Kelowna, West Kelowna, Rutland, Vernon, Oyama, Penticton, Oliver, Osoyoos and Keremeos and in Penticton, Kelowna, West Kelowna, Glenmore, Rutland, Lake Country, Vernon, Salmon Arm and Osoyoos in 2017.

**Table 1. BMSB trap captures in Southern Interior B.C. (May - August, 2019)**

Region	# of traps	Adults	Nymphs	Total BMSB	Average BMSB/trap
Central Kelowna	42	454	321	775	18.45
East kelowna	3	1	0	0	0
South Kelowna	1	0	0	0	0
West Kelowna	6	3	2	5	0.83
Ellison	3	0	0	0	0
Glenmore	7	8	2	10	1.43
Rutland	7	0	0	0	0
Belgo	1	0	0	0	0
Salmon Arm	11	3	0	3	0.27
Enderby	1	0	0	0	0
Armstrong	1	0	0	0	0
Vernon	9	1	0	1	0.11
Lavington	1	0	0	0	0
Oyama	5	0	0	0	0
Carr's Landing	3	0	0	0	0
Winfield	8	1	0	1	0.13
Peachland	3	0	0	0	0
Summerland	6	0	0	0	0
Penticton	9	0	0	0	0
Naramata	5	0	0	0	0
Okanagan Falls	1	0	0	0	0
Oliver	4	0	0	0	0
Osoyoos	5	2	0	2	0.40
Keremeos	3	0	0	0	0
Cawston	2	0	0	0	0
Creston	4	0	0	0	0

**Total number of traps: 151 Total BMSB (May – August, 2019): 797**

**Table 2. BMSB trap captures for Central (Downtown) Kelowna, April – August, 2017 - 2019**

Week	# traps	BMSB Adults 2019	BMSB Nymphs 2019	Total BMSB 2019	Average BMSB/trap 2019	Average BMSB/trap 2018	Average BMSB/trap 2017
23-Apr	NA	NA	NA	NA	NA	0.12	N/A
30-Apr	NA	NA	NA	NA	NA	0.24	0
07-May	20	27	0	27	1.35	0.24	0.38
14-May	39	33	0	33	0.85	0.68	0
21-May	42	3	0	3	0.07	0.43	0.2
28-May	42	6	0	6	0.14	0.16	0.05
04-Jun	40	6	0	6	0.15	0.21	0.3
11-Jun	42	11	3	14	0.33	0.03	0.61
18-Jun	42	13	15	28	0.67	1.18	0.09
25-Jun	42	1	23	24	0.57	1.05	0.64
02-Jul	42	1	1	2	0.05	0.85	5.69
09-Jul	42	7	35	42	1.0	0.95	10.85
16-Jul	42	3	14	17	0.40	1.49	4.36
23-Jul	42	5	36	41	0.98	1.27	10.5
30-Jul	42	35	60	95	2.26	3.63	5.52
06-Aug	42	125	53	178	4.24	4.03	5.61
13-Aug	40	69	44	113	2.82	3.18	8.11
20-Aug	42	69	17	86	2.05	3.73	1.65
27-Aug	42	40	20	60	1.43	2.22	4.42

**Hosts**

Plant hosts of brown marmorated stink bug in Southern Interior BC include wild chokecherry, maple, lilac, honey locust, tree of heaven, mountain ash, scarlet firethorn, shiny cotoneaster, catalpa, magnolia, snowberry, hazelnut, rose, rose of Sharon, cedar, Virginia creeper, ash, elderberry, ginkgo, sumac, hops, runner bean, hazelnut, Oregon grape, privet and prickly lettuce.

**Biological control**

Native parasitoids have been collected from exposed BMSB eggs and are yet to be identified. We collected red velvet mites from BMSB eggs.

**Further information on BMSB:**

[www.gov.bc.ca/invasivestinkbug](http://www.gov.bc.ca/invasivestinkbug)

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*Brown marmorated stink bug adult and nymph. Photo credit: BC Ministry of Agriculture*

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