

Understanding Population Increase by Cranberry Tipworm in BC

When do overwintered tipworms
add to the population in the field?

- Early spring only?
- Through the growing season?

What is an overwintered tipworm?



3rd instar larva



Drops to soil,
forms pupa



after winter,
adult male or
female emerges

How are overwintered tipworms detected?



Emergence trap



Trap seated into cranberry vines



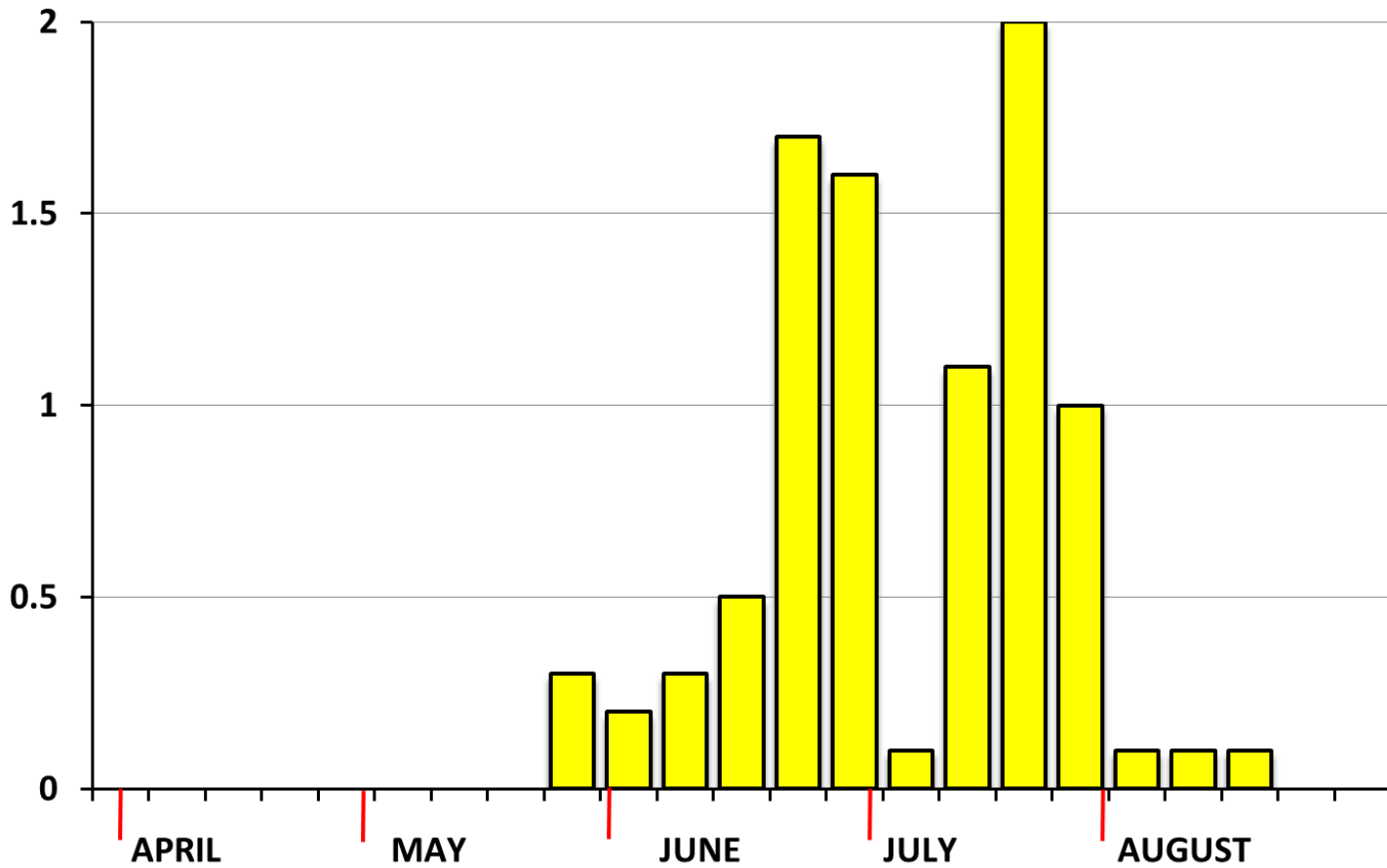
Emerged tipworms are caught on the yellow sticky card in top bucket

In 2015, overwintered tipworms were detected in May, June, July and August.

Farm A		in	●	●	●	●	●		●	●	●	●	●	●		●		out
Farm B		in	●	●	●	●	●	●	●	●	●	●	●	●	●			out
Farm C			in		●	●		●	●	●		●	●					out
Farm D	in				●	●	nc	●		●	●		●					out
Farm E	in	●	●			●	●	●		●	●	●						out
Farm F	in	●		●	●	●		●			●							out
WEEK	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	MAY		JUNE				JULY				AUGUST				SEPT			

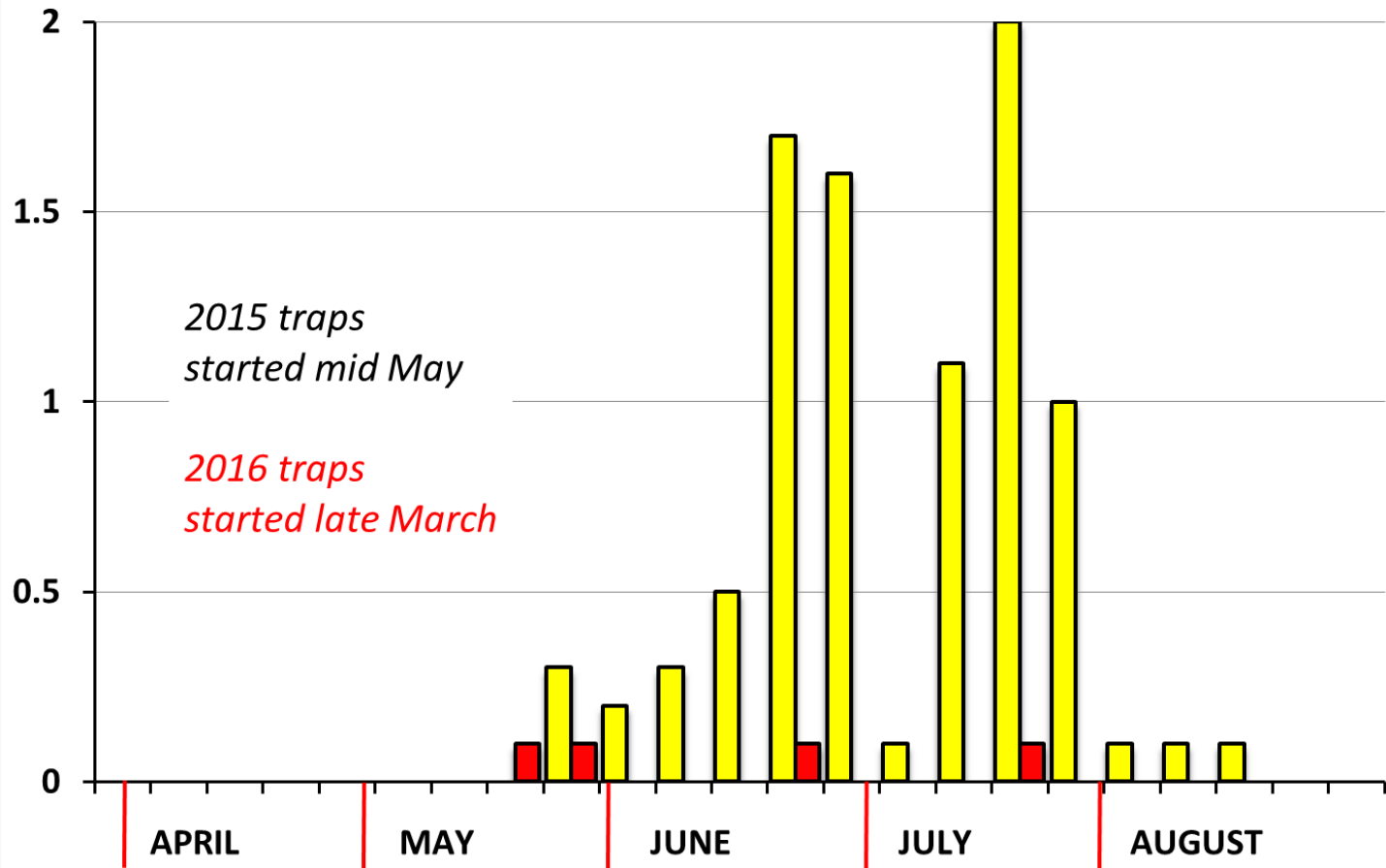
OVERWINTERED TIPWORMS per TRAP per WEEK on FARM B

2015



OVERWINTERED TIPWORMS per TRAP per WEEK on FARM B

2015 2016



Understanding Population **Decrease** by Cranberry Tipworm in BC

Overwintered tipworms add to the population in the field throughout the growing season.

Why were there so few in 2016?

???

Why were there so few overwintered tipworms in 2016?

- post-bloom applications of Movento in 2013, 2014 and 2015 reduced the number of larvae that dropped to the soil, entered the pupal stage and emerged the following spring.
- good scouting ensured proper timing and number of applications of Movento.
- application system provided good coverage.
- parasitoids of cranberry tipworm probably helped.

Acknowledgements

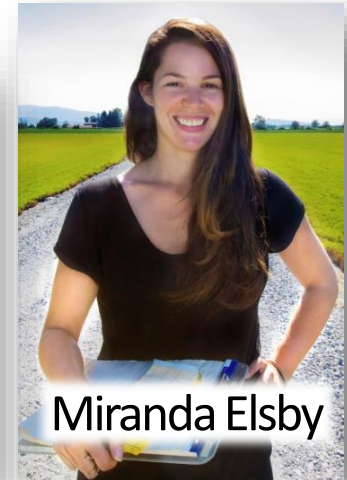
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PEOPLE:

- AAFC technician Sneh Mathur
- Heidi van Dokkumburg at ES Cropconsult
- Grower-cooperators in Langley and Pitt Meadows
- University student research assistants!



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Old and **new** scientists
who can conduct research on cranberry:

- Dr. Sheila Fitzpatrick – entomology
- **Dr. Paul Abram – entomology, biological control**
- **Dr. Martine Dorais – plant physiology**
- **Dr. Aimé Messiga – soils and nutrient management**
- Mr. Markus Clodius – Minor Use Pesticide biologist

