

81th Annual New England, New York, Canadian Fruit Pest Management Workshop
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2019 REPORT - QUEBEC APPLE ORCHARDS
PEST TYPE: INSECTS AND MITES

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A. OVERALL SITUATION :

- Relatively mild and snowy winter
- Cool and rainy spring
- Bloom and pollination were very good, fruit set was excellent
- Hot and dry in July and until mid-August, but otherwise rather “normal” summer and fall weather
- Crop volume from normal to slightly below-average. Nicely colored fruits, but below-average size in many places

B. MAJOR PROBLEMS, UNUSUAL OR STRIKING EVENTS

Codling moth (*Cydia pomonella*): populations were much more important this year than previous years but control was achieved fairly easily, thanks to the area-wide mating disruption program which supports 70% - 90% of the cost of dispensers. Over 1500 ha of orchards were under MD in 2019, which represents ca 45% of the production.

Obliquebanded leafroller (*Choristoneura rosaceana*): many orchards under MD for codling moth (see above) suffered higher pressure from OBLR, although pressure was also high (and treatments also required) in orchards not under MD.

Japanese beetle (*Popillia japonica*): localized, increasing populations in areas already infested last year (Eastern townships and Monteregian Hills). Fond of Honeycrisp apples. Tachinid parasitoid *Istocheta aldrichi* not as apparent as in 2018, when parasitism rate sometimes reached 50%. **Rose chafer** (*Macrodactylus subspinosus*) alternatively reported in the Laurentians.

Brown marmorated stink bug (*Halyomorpha halys*): multiple trap captures in orchards this year, all in the Monteregians and all at the end of the season (September-October). Well-established population now in the city of Montreal. **Other stink bugs** (mainly *Euschistus servus*) : mostly on Honeycrisp and Ambrosia.

Wild turkey (*Meleagris gallopavo*): increasing populations, although still anecdotic. Fond of Honeycrisp and GingerGold apples.

C. LESS PROBLEMATIC THAN USUAL

Tarnished plan bug (*Lygus lineolaris*): the cold and wet spring is possibly the reason for this, but apple buds were relatively spared from TPB visits.

European apple sawfly (*Hoplocampa testudinea*): this species has been much less present and problematic than usual in most regions. Parasitism? Weather? Explanations for this are welcome.

Plum curculio (*Conotrachelus nenuphar*): control was not problematic despite a longer than usual activity period.

Aphids (all species including the green, the rosy and the woolly apple aphid): almost no control measures needed for any of the three pests. On average, low population levels and natural enemies present.

D. AS USUAL

As damaging as usual	As minor as usual
Mullein plant bug	Spotted tentiform leafminer
Spider mites	Apple curculio
Apple maggot	Apple flea weevil
Rust mites	Redbanded leafroller
Lesser appleworm	Dogwood borer*
Brown stink bug	Green fruitworm
	Leafhoppers

* mating disruption used in some orchards

E. OTHER OCCASIONAL ARTHROPODS IDENTIFIED IN COMMERCIAL ORCHARDS THIS YEAR*

Pests	Family	No. cases
<i>Hoplocampa halcyon</i>	Tenthredinidae (Shadbush sawfly)	2
<i>Clepsis persicana</i>	Tortricidae (White triangle leafroller)	1
<i>Archips rosanus</i>	Tortricidae (European leafroller)	1
<i>Blastoacna atra</i>	Elachistidae (Apple pith moth)	1
<i>Euschistus servus euschistoides</i>	Pentatomidae (Brown stink bug)	19
<i>Euschistus tristigmus luridus</i>	Pentatomidae (Dusky stink bug)	1
<i>Halyomorpha halys</i>	Pentatomidae (Brown marmorated stink bug)	3
<i>Grapholita molesta</i>	Tortricidae (Oriental fruit moth)	1
<i>Grapholita packardii</i>	Tortricidae (Cherry fruit worm)	1
<i>Pasaphila rectangulata</i>	Geometridae (Green pug moth)	1
<i>Synanthedon fulvipes</i>	Sesiidae	1
<i>Rhynchaenus pallicornis</i>	Curculionidae (Apple flea weevil)	1
<i>Synanthedon fulvipes</i>	Sesiidae	1
<i>Anthonomus gradigibbus</i>	Curculionidae (Apple curculio)	1
Beneficials	Family	No. cases
<i>Orthotydeus californicus</i>	Tydaeidae	1

*By the Quebec diagnosis lab, MAPAQ.