

75th Annual New England, New York, Canadian Fruit Pest Management Workshop
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2013 REPORT - QUEBEC APPLE ORCHARDS
PEST TYPE: INSECTS AND MITES

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A. OVERALL SITUATION :

Relatively “normal” season weather-wise, except for a severe frost event at bloom (between -1°C and -2°C for two consecutive nights in most apple growing areas). These conditions most probably explain high levels of fruit russetting (as high as 50% of fruit in some orchards) and ring frost (as high as 20% in some orchards).

Harvested fruit were generally bigger, firmer, sweeter and more colored than average in most orchards. However, less seeds than usual were noticed in harvested fruit, which may affect long term conservation.

B. MAJOR PROBLEMS, UNUSUAL OR STRIKING EVENTS

Tarnished plant bug (*Lygus lineolaris*): exceptionally high temperatures for one week, starting around bud break (last week of April) provided favorable conditions for tarnished plant bug activity; fruit damage was also commonly seen at harvest, this year being one of the most noticeable year for this pest in the last 10 years.

Rosy apple aphid (*Dysaphis plantaginea*) : a sporadic pest in our area, more prevalent than usual this year

Apple leaf curling midge (*Dasineura mali*) : populations and distribution are steadily increasing year after year. Growers and consultants know little about the economics of control measures against this insect. It was present in all growing areas in 2013, and in most orchards.

Apple pith moth (*Blastodacna atra*): larvae have been present in orchards southwest of Montreal for about five years, and they are more and more frequently observed, possibly damaging new plantings. First mentions in the Monteregians this year.

C. UNUSUALLY QUIET THIS YEAR

Apple maggot (*Rhagoletis pomonella*) : low populations this year in most apple growing areas; no cues as to why. GF-120 is getting popularity as a replacement for late-season sprays of OP or neonics.

Spotted tentiform leafminer (*Litholettis blancardella*): this pest is less and less pestiferous, neonicotinoids applied in spring as a replacement tool for OPS seems to wipe out the first generation.

Obliquebanded leafroller (*Choristoneura rosaceana*): used to be one of our most problematic leps, not a problem this year, maybe it is been taken care of by insecticides applied against codling moth.

D. SURVEYED PESTS

Spotted wing drosophila, *Drosophila suzukii* : monitoring started in early may in Quebec but first adults were observed in soft fruits only in mid-July. Surprisingly, adults were not observed in field border traps before being observed in traps within the field, despite adequate (apple cider vinegar + ethanol) bait was used. Population levels evolved similarly than in 2012 but damage was not as high as expected. No damage was observed in

summer strawberry and raspberry, little damage in highbush blueberry (late harvest). Contrary to what happened in 2012, panic was not observed within growers and most of them decided not to apply insecticides except for fall-bearing raspberry, to comply to market requirements. A few adults have been trapped in lowbush blueberry in northern Quebec but no damage was observed. Adults have been also observed in blackberry, sea buckthorn, blue honeysuckle and elder. Adults were still being trapped increasingly one month after fruit harvest.

Brown marmorated stink bug, *Halyomorpha halys* : no cases for this year in Quebec. The insect is now established in Hamilton, Ontario, and has also shown up in parts of the Greater Toronto Area, Newboro, Windsor, and Cedar Springs. Has not been found in agricultural crops yet, but at least five insecticides have been registered in advance for fruit trees: methomyl, clothianidin, malathion, diazinon and thiamethoxam.

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

Pests	Family	No. cases reported
<i>Hedya nubiferana</i>	Tortricidae (Green Budworm Moth)	1
<i>Grapholita packardii</i>	Tortricidae (Cherry Fruit Worm)	1
<i>Acrosternum hilare</i>	Pentatomidae (Green Stink Bug)	1
<i>Euschistus servus euschistoides</i>	Pentatomidae (Brown Stink Bug)	1
<i>Recurvaria nanella</i>	Gelechiidae (Lesser Bud Moth)	1
<i>Phyllobius oblongus</i>	Curculionidae (Brown Leaf Weevil)	2
Beneficials	Family	No. cases reported
<i>Orthotydeus californicus</i>	Tydaeidae	1

* Thanks to Jean-Philippe Légaré, agr. entomol., Quebec diagnosis lab/diagnostic clinic, MAPAQ,