

2007 Cranberry Field Day

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EXTENSION

World Class. Face to Face.

Lily

Control lesson

- High volume sprays of Callisto better than low volume
- Surfactant minor effects
- Need high rates for best efficacy
- Earlier timing is better
- Can get decent control with Callisto, but with thick vine coverage it is difficult to get canopy penetration.
- Vinegar treatment OK, but lack consistency

Arrowgrass

Control lesson

- Immediate postharvest, 2,4D amine is pretty effective (0.5 to 1%)
- Timing window for Weedar 64 is narrow (must be viable green tissue)
- Additions of 2,4D G may improve efficacy
- Phytotoxicity to cranberries none to slight, but may increase with each additional treatment

Sourgrass/ sorrel

Control lesson

- Multiple postharvest and winter spot treatments of Stinger
- Cease treatments before bud break
- Supplemental Callisto treatments minor benefit

Buttercup

Control lesson

- Herbicide C tolerance package was submitted to EPA June 2007; expect label in spring/summer 2008.
- Winter to Spring treatment with herbicide C very effective on established plants.
- Seed bank of buttercup is significant and will required subsequent treatment of seedlings with Callisto to obtain midseason control

Yellowweed

Control lesson

- Callisto adequate for suppression, but requires early and frequent applications.
- An effective crop -safe herbicide has been found, but registration will be a long uphill battle.

Silverleaf

Control lesson

- Callisto is a good replacement for Casoron for silverleaf control and an effective means to mitigate for decline in vine density following long-term Casoron use.
- Best efficacy with treatments applied at first and second flush of weed growth.
- Permanent control after several years.
- Control is not improved with an early 2,4-D burndown.
- Reduced Casoron use results in improved productivity

Horsetail

Control lesson

- Weed mapping with spot treatment of Casoron
- Multiple early applications of Callisto, starting at first growth

Fireworm

Control lesson

- All the new chemistries control fireworm, but when applied via chemigation none are as good as Diazinon.
- “DP” shows promise with having reasonable chemigation efficacy.
- Delegate appears to be a very good replacement for Success and other biorational insecticides.
 - However, we don't have chemigation data for Delegate.
 - Product will be available in 2008; price structure is pending.
 - Success will be available through 2008, but at a reduced price.

Girdler

Control lesson

- None
- Take full advantage of 2008 being “last” year for Diazinon 14G.
- Nematodes likely to be the most suitable replacement
- No new insecticides work

Tipworm

Control lesson

- Potential for buildup in populations with a transition to biorational controls.
- Sites with heavy damage still seemed to have decent yield. We will monitor long-term yield impacts in subsequent seasons.
- Control with frequent applications of an OP is feasible, but not really advised.
- Two new alternative reduced risk insecticide looks promising, but one appears to cause some phytotoxicity.
- First major infestation starts early June
- Second major infestation starts in July and continues to increase

Weevil

Control lesson

Adulticides

- Not convinced the commercial Cryolite bait is an ideal formulation
 - Efficacy and mold issues
- Apple press cake or feed grade beet pulp might be suitable alternatives.
 - Beet pulp is readily available and cheap.
- Baits only provide partial control.
- Chemical broadcast adulticides only provide partial control.
- Combinations of chemical broadcast treatments + baits provided the best efficacy.

Larvicides

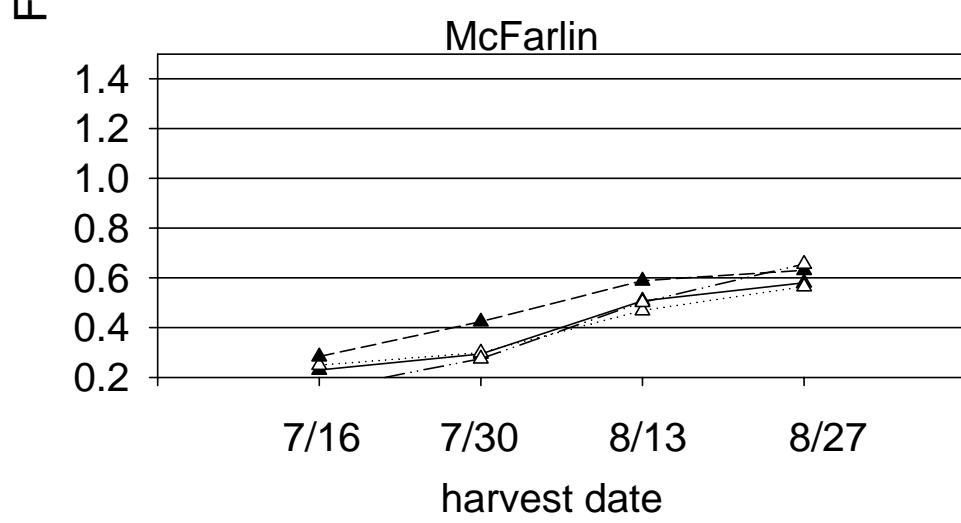
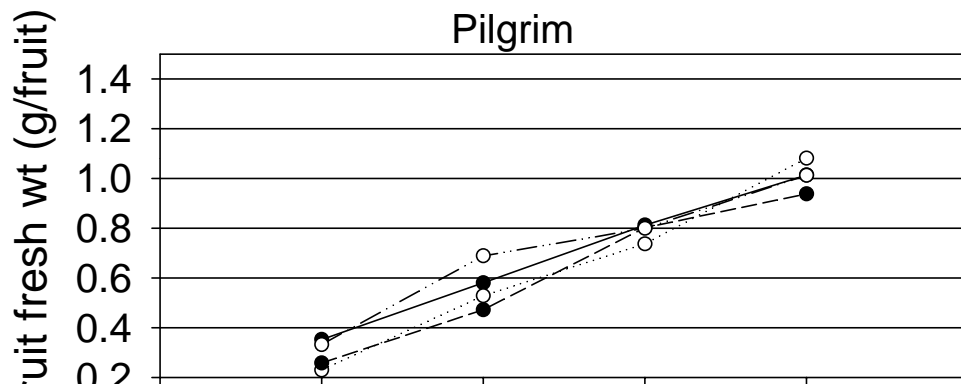
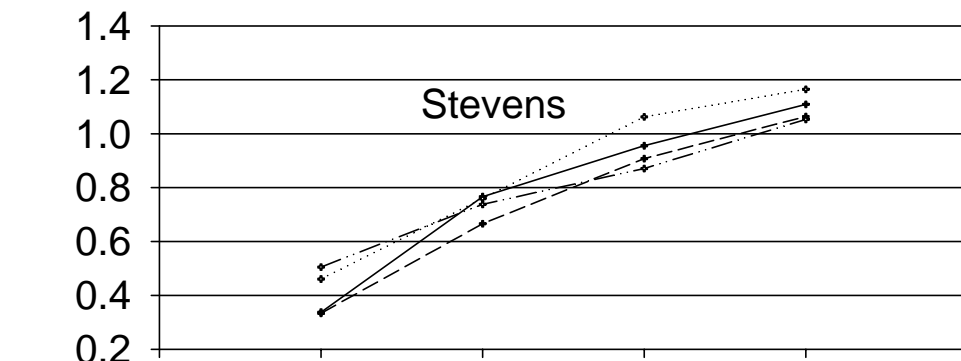
- One or two Admire applications by themselves are not adequate.
- Best chemical control was a combination of 2 adulticide + 2 larvicide treatments
- A single nematode treatment (late summer) provided excellent efficacy.

Fruit rot

Control lesson

- No advantages or disadvantages seen to date (2005 & 2006) for extra mid-bloom fungicides

2007



Returns per acres at different yield and reductions in fruit weight with early harvest

Bbl/ac	100 % yield @ \$43/bbl	20% decrease @\$46.5/bbl	10% decrease @\$46.5/bbl	5% decrease @\$46.5/bbl
300 bbl/ac	12900	11160	12555	13252
200 bbl/ac	8600	7440	8370	8835
100 bbl/ac	4300	3720	4185	4417

Biggest affects on high yielding beds with significant fruit growth remaining

New variety plantings

Variety	BBL/ac 2005	BBL/ac 2006	~BBL/ac 2007	Fruit size g/fruit 2006
'Crimson Queen'	77	179	256	1.9
njs95-37	85	277	226	1.5
'Mullica Queen'	23	20	165	2.1
cnj96-44-83	54	203	133	1.8
cnj95-20-20	32	180	243	1.4
cnj93-9-42	61	187	256	1.5
njs93-13-100	46	135	223	1.5
BE4	150	217	240	1.2
AR2	16	222	260	1.7
Bain Favorite #1	46	177	173	1.9
Pilgrim	257	202	253	1.9
Stevens	1	48	133	1.6
njs98-65	11	201	226	1.9
njs98-28	27	171	253	1.6