Issue 9, May 18, 2004

Current DD accumulations

Location	Base 32 F	Base 43 F
Belchertown, SkyBit E-Weather		537
(01/01/04 - 05/17/04)		
Belchertown, SkyBit E-Weather		
(04/13/04-05/17/04)	(90*)	

% mature scab spores

ORCHARD RADAR for west-central Massachusetts (Belchertown)

ORCHARD RADAR for eastern Massachusetts (Waltham)

Current bud stages

Location	McIntosh	Honeycrisp	Pear	Redhaven	Regina
	apple	apple		peach	sweet cherry
Belchertown UMass CSO					
(05/17/04)					
	4-6 mm	3-5 mm	5-7 mm	shuck-split	10 mm

Current bud stages also available on UMass Fruit Advisor, http://www.umass.edu/fruitadvisor/. This will be the last week for current bud stage pictures.

Upcoming meetings/events

Date	Meeting/Event	Location	Time	Information
May 24-	HACCP for the	Storrs, CT (Sponsored		Diane Wright
25	Juice Industry	by UConn and URI)		Hirsch
				203-427-7888
May 25	New Hampshire	Gould Hill Orchard,	5:00 P.M.	George
	Fruit Twilight	Contoocook, NH		Hamilton
	Meeting			603-641-6060

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Insects J. Clements and K. Leahy

The recent warm weather has been ideal for **plum curculio** activity. In fact, damage has already been observed in apples, pears, and cherries. As fruit has sized up rapidly, you need to be covered with a whole-orchard spray. As you know Imidan or Guthion are the insecticides of choice, however, other options include Danitol, Actara, Avaunt, or Assail. Curculio will continue to be active for several more weeks.

Lepidoptera worm activity has been disturbingly noticeable this year. This includes OP-resistant **oblique-banded leafroller** (OBLR), as well tent caterpillars, pug moth, gypsy moth, etc. The petal-fall and first-cover curculio spray(s) will control most of these, however, OBLR if present is best controlled with Spintor, Confirm, Intrepid, Entrust, or Warrior. Keep an eye on young plantings and treat if worms are found.

Growers with a history of **leafminer** problems (or as indicated by scouting) should have treated with Provado by now. If not, Lannate, Agri-Mek, Spintor, or Assail will give control if applied soon.

Peaches and nectarines become very susceptible to **tarnished plant bug** at shuck-split. Ambush, Pounce, or Asana are best choices in peach plantings with developing fruit.

Finally, **pear psylla** nymphs are at a susceptible stage now. From the Michigan Fruit Management Guide: "One application of Agri-Mek at 1st cover (14 days post petal-fall) will generally provide season-long control of pear psylla and pear rust mite. Agri-Mek users should be sure to use the 20 ounce rate of Agri-Mek + 1 gallon of a paraffinic spray oil (Sun Ultra Fine Oil or other summer oil) per acre."

Diseases J. Clements and D. Cooley

Based on degree-day accumulations, primary **apple scab** season should be drawing to a close within a week or two in 'average' Massachusetts orchards. Precipitation has been spotty, so there are still spores to be released. Bottom line: stay covered for at least another week or two. A tank mix including protectant and 'kick-back' fungicides is the way to go. Non-bearing trees should be receiving this fungicide spray to keep mildew at bay.

Unexpected tree collapse might be a consequence of **root and crown rot** caused by *Phytophthora sp*. The extended period of abundant precipitation causing waterlogged soils can been conducive to development of this disease in apples and stone fruit. It is characterized by poor terminal growth and foliage that becomes small, yellowish, and stunted. A distinct line between brown, dead, diseased root tissue and the above-ground live tree part can be observed at ground level if a knife is used to remove the outer bark. Control options include planting on well-drained sites, using resistant rootstocks (M.9 and B.9 are generally resistant, MM.106 is susceptible, and M.26 and M.7 somewhere between), and planting on berms if the soil is marginally wet. Ridomil and Aliette are chemical control options, but no substitute for cultural controls as described. For more information on root and crown rot see:

http://www.caf.wvu.edu/kearneysville/disease_descriptions/omcrown.html

Horticulture J. Clements, W. Autio, and D. Greene

Warm temperatures since petal-fall have resulted in rapid fruitlet growth of apples. As fruitlets approach 10 mm, chemical thinning should be on your mind. There are many options, but in general, over-thinning is not a problem, and there is no reason to believe set has not been moderate-heavy. Carbaryl (Sevin XLR Plus at 1 pint/100 gallons) with NAA (10 ppm) is a standard thinning treatment where somewhat aggressive thinning is desired. A new option this

year is **Maxcel**, with or without carbaryl. General use recommendations for Maxcel include: apply when fruit are 5-15 mm diameter (8-10 mm best); use 100-150 ppm Maxcel in 100 gallons water per acre (dwarf, semi-dwarf trees); add carbaryl (Sevin XLR Plus, 1 pint per 100 gallons) if more aggressive thinning desired; and apply when temperatures are warm (65 F +) for a few days following the Maxcel application. Maxcel is more potent than Accel (which it essentially replaces), particularly when it is combined with carbaryl.

Memories of Ron Prokopy W. Coli

By now, orcharding and University communities all over the world have learned that we have all lost a rare and unique individual: Dr. Ron Prokopy. As Wes Autio put it so well in a recent email, "Ron's boundless support of the apple industry will be sorely missed, and his extensive research contributions will never be forgotten."

As Ron would have wanted, and in spite of the depth of our feelings of loss, I hope we can all focus on how he lived his life rather than on this untimely loss. I'm sure there will be a lot of sharing of stories at the memorial service planned for May 22 at his beloved farm in Conway. For those who cannot attend, I'd like to offer just a few recollections about the 29 years I have known Ron.

The first time I every met him, I knew right away that Ron was not your typical University faculty member. I don't know if it was the longer than normal hair style, the South American knit bag that he always carried with him (and which inevitably contained bags of neatly sliced,

home grown carrots), or his propensity to take his little "rests" (cat naps that he would always take while we were on route to some place or another).

When he first arrived at UMass Amherst in 1975, he was already well known in Entomology circles for his ground breaking and innovative work developing effective, multi-colored, sticky sphere traps for monitoring fruit flies. The story goes that when another faculty member



(Dr. John Stoffolano) was introducing Ron to the clerical staff in Fernald Hall, he was obviously excited to have this new high-powered behavioral ecologist in the department. John, assuming perhaps that the clerical staff was familiar with Ron's earlier research said: "This is Ron Prokopy, our new faculty Extension Entomologist. You know, he's the guy with the red and yellow sticky balls!!" Once all present stopped laughing, John told them what he *really* meant to say.

While working on a special research project on traps for the blueberry maggot fly with Ron, I continued to gain a better perspective on this unique guy. I learned that he was about the hardest working person I'd ever known. There was never a single field day that Ron wouldn't be out there counting flies with me. When the data were finally analyzed, he was insistent that we write

the results up for a paper to submit to an Entomological journal. Those researchers who know him well are probably saying "What? Only *one* paper?" since Ron, in addition to arguably knowing more than anyone else in the world about the Family Tephritidae (fruit flies), was also incredibly productive in his publication record.

In spite of his brilliant intellect, Ron was very down to earth, very easy to talk with, and incredibly committed to extension work: once again not typical of University Faculty in general. He loved his days in the field. There was literally nothing he preferred more than sitting in the orchard observing his beloved insect subjects. Ron always joked that when he died, he wanted to be reincarnated as an apple maggot fly. I hope for all our sakes that he does not get his wish, because I envision apple maggot becoming A LOT BIGGER problem if the species has Ron's incredible knowledge and energies to draw upon.

Ron Prokopy was truly deserving of the 'one-of-a-kind' label. While it is comforting to know that Ron was following his passions right to the last, and that his passing was peaceful, the fruit industry, the science of Entomology, the University of Massachusetts, his many graduate students, and all his many friends and colleagues will miss him dearly.

With unending respect and love, Bill Coli