

**Washington County Ag Report  
July 20, 2004**

Contributors are Sandy Buxton, Colleen Converse, Aaron Gabriel, Laura McDermott, and JJ Schell.

**“It is easy in the world to live after the world’s opinion; it is easy in solitude, to live after our own; but great is the (person) who, in the midst of the crowd, keeps with perfect sweetness the independence of his character.” -- Ralph Waldo Emerson**

**Announcements****FIELD CROP SCOUTING, COME EARN A PESTICIDE RECERTIFICATION CREDIT BY SCOUTING WITH ME FOR ONE HOUR:**

**Tuesday, July 27 @ 11 am, at Marchaland Farm, 211 Burton Rd., Easton**

**Tuesday, August 3 @ 11 am, at Chambers Farm, Chambers Rd., Salem**

**Tuesday–Wednesday, July 27-28, Northeast Regional Cutflower Meeting.** Pre-Registration is \$50/person. For more information visit <http://www.hort.cornell.edu/cutflower.html>.

**Wednesday, July 28, Cornell Floriculture Field Day.** Pre-registration is \$65/day. For more information visit <http://www.greenhouse.cornell.edu/>.

**Wednesday, July 28 – Friday, July 30, Cornell Landscape Management Short Course For Landscape Managers and Landscape Architects.** Detailed information regarding registration, course tuition and lodging options on our web site:

<http://www.hort.cornell.edu/instruction/short/landscapes/july2004.htm>

Questions? Contact Joann Gruttadaurio at 607-255-1792 or [jg17@cornell.edu](mailto:jg17@cornell.edu)

**Wednesday, July 28, 9AM - 3PM – Young Dairy Managers Seminar - SUNY Cobleskill**

The program is for youth interested in dairy production and management and will consist of 4 one hour sessions on the topics of cow behavior, fresh cow management, nutrition and hoof care. Lunch is included with an afternoon ice cream and door prize wrap-up session. There is no charge for the workshop. Contact the Agriculture and Natural Resources Division office at 518 255-5324 with questions. Pre-register by calling or emailing no later than Friday July 23<sup>rd</sup>.

**Thursday, August 5<sup>th</sup> at 6:30 p.m.- Vegetable Twilight Meeting** at Jim Stannards Farm on Harkness Road in Center Cambridge area. DEC Pesticide Recertification credits will be available. Come and take a look at the SARE project, which is examining two different composts in a plasticulture system. Call 746-2560 for more information and directions.

**Fri. & Sat. August 20 – 4<sup>th</sup> ANNUAL ORGANIC DAIRY FIELD DAYS** – sponsored by the Northeast Organic Dairy Producers Alliance, in Westfield, VT (Jack & Anne Lazor’s Farm) and Hyde Park, VT (John & Judy Clark’s Applecheek Farm). Workshop topics include soil fertility, animal health, along with a pasture walk. For more information, or to receive a NODPA Field Days Brochure, contact the NOFA-VT office 802-434-4122 or email [sarahf@globalnetisp.net](mailto:sarahf@globalnetisp.net) or [www.organicmilk.org](http://www.organicmilk.org) or [www.nodpa.com](http://www.nodpa.com).

Many upcoming fall courses for all levels of Beekeepers. For more information about the Master Beekeeping Program and a schedule of upcoming programs, visit [www.masterbeekeeper.org/masterbeekeeper.htm](http://www.masterbeekeeper.org/masterbeekeeper.htm) or call 607-255-3280.

The Cambridge Farmers' Market was recently granted \$22,060 from the Grow New York Farmers' Market Grant Program. This money will help to install a handicapped accessible public bathroom, procure benches and signs and install electrical outlets and a sidewalk, all of which are intended to attract customers to the market's new location in the Cambridge freight yards. This state program gave out \$169,000 to 13 recipients throughout the state. Another local winner was the Glens Falls Farmers' Market which received \$8,645 to complete the final phase of a multi-phased plan to upgrade the farmers' market with the addition of 100-square foot restroom facility and changing station. Congratulations to both winners!

**Midwest Commodity Prices - from the Wall Street Journal**

Corn per bushel	\$2.25/bu	Cotton Seed Meal per ton	\$180/ton
Soybean per bushel	7.32/bu	Corn Gluten Feed	69/ton
Hominy Feed per ton	76/ton	Wheat, soft white	3.99/bu
48% Soybean meal per ton	270/ton	Tallow per pound	.22/lb

These prices are provided only to show where the general market trends are moving and to help you determine appropriate ration ingredients. Local prices will vary due to shipping, processing, and discounts.

**Weather Data – 2004 and average of 1999 - 2003**

	Argyle		Easton		Whitehall		Jackson	
	2004	Average '99 – '03	2004	Average '99 – '03	2004	Average '99 – '03	2004	Last Year
<b>Rain</b> Past Week	<b>1.59</b>	1.79	<b>2.45</b>	1.04	<b>1.06</b>	0.93	<b>1.38</b>	1.26
So far this month	<b>4.85</b>	3.18	<b>4.30</b>	2.77	<b>2.42</b>	3.35	<b>2.94</b>	2.23
Total since April 1 <sup>st</sup>	<b>15.49</b>	12.87	<b>15.30</b>	13.37	<b>12.60</b>	13.60	<b>15.18</b>	9.97
<b>GDD Base 41</b> Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	<b>210</b>	210	<b>215</b>	210	<b>220</b>	219	<b>215</b>	201
Since April 1 <sup>st</sup>	<b>2038</b>	2026	<b>2103</b>	2104	<b>2305</b>	2267	<b>2100</b>	2077
<b>GDD 86/50</b> [hi temp + low temp]/2 - 50 High's >86°F are set to 86°F, low's <50°F are set to 50°F								
Past Week	<b>147</b>	145	<b>153</b>	144	<b>159</b>	153	<b>152</b>	137
Since April 1 <sup>st</sup>	<b>1388</b>	1370	<b>1469</b>	1445	<b>1563</b>	1540	<b>1461</b>	1418

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**DAIRY NOTES:** Cattle will automatically reduce their feed intake during hot weather. Typically, early lactation cows are most swiftly and severely affected. This decreased forage intake alters the composition of the rumen and leads to acidosis and reduced fat content of milk. Forage generates more heat than a grain ration, thereby contributing to reduced intake. One way to correct this problem is to feed your high quality forage during the summer, thus requiring a lower intake to maintain a balanced ration. Never, however, reduce the fiber level below 18 percent to 19 percent ADF and 25 percent to 28 percent NDF. If cows reduce their intake during heat stress, more nutrients need to be packed into a smaller volume of feed. Remember that a cow's energy requirement for lactation is unchanged and her energy needs to remain cool actually increase. Therefore, maintaining adequate nutrient intake becomes critical to avoid undue milk production loss. Optional methods to increase dietary nutrient density include feeding high quality forage, feeding more grain, and use of supplemental fats. Your primary feeding goal should be to maintain intake and limit the negative effect of heat stress on milk production. During hot, humid weather, it is advisable to increase the number of times per day that one feeds. Increasing the number enables one to feed less at any one time, thereby avoiding heating and spoilage of the feed in the bunk.

**FARM BUSINESS MANAGEMENT:** Dairy farming, as always, is facing challenges all around. I spent some time with a couple of dairymen from Florida, in the Lake Okeechobee region, where milking cows is a major undertaking because of the environmental regulation. Their thoughts for their northern counterparts included “pay attention because these rules are coming to you at some point and you want to be aware of what they mean.” Farms cannot expand without a permit and that process can take 5+ years if things go well. The farmers are also expected to catch and control every drop of water that falls or is produced on their property (not just around the barnstead) for 72 hours!! Think about what could happen and try to prepare.

**LIVESTOCK PEST MANAGEMENT:** This time of year fly populations explode. Moist conditions favor fly development. Plus, heat, humidity, and lots of flies means a lot of misery for animals, as well as people. Animal performance is reduced considerably by this stress. So, take the time clean up areas of rotting organic matter; put up fly traps; apply insecticides to animals and buildings; distribute fly predators; and employ any other control measure you can.

**CAFO UPDATE:** (From Lee Telega, Pro Dairy) As you may know, the initial NYS CAFO Permit expired on June 30th and a New Permit took effect on July 1st. Current NY farm numbers participating in the permit program are:

Large CAFOs -- 138 Medium CAFOs – 494

98% of the Large CAFO have certified they have developed a CNMP

74% of the Medium CAFOs have certified they have a CNMP

118 of the Medium CAFOs missed their deadline for filing an Appendix B (Certificate of CNMP Development).

Although I have not seen it, I hear all CAFOs were sent a package containing a cover letter and copy of the new CAFO Permit and forms. This went out from DEC shortly after the July 4th holiday. There have been some reports of confusion about what the cover letter actually says. Most of the confusion centers around the need for a participating CAFO to file another Notice of Intent. From my understanding, this is not necessary. Since the new permit requires annual

reporting, when the farm files this annual report (due in March 2005), that will serve as notice that the farm will continue to operate under the permit.

## **CROPS**

**Soil Quality:** This week I have been pulling up corn roots. This is a good way to evaluate soil quality. In some fields, the roots are reaching straight down into the soil, uninhibited. In other fields, the roots remain in the top 4 to 6 inches of soil and take a 90<sup>o</sup> turn to grow horizontally, when they reach the hardpan.

**Beneficial Insects:** There is a tremendous variety of beneficial insects in alfalfa right now: lady beetle larvae and adults, lacewing (antlions), flower flies, parasitoids, and others. Also the wet weather is promoting **diseases that are killing aphids and potato leafhoppers**. Look for brown, mashed, fuzzy aphid body remains.

**Alfalfa: Do you know which varieties you planted? Are your alfalfa varieties resistant to potato leafhopper??** I have seen a few new seedings that are over the threshold for PLH and need an insecticide application for control. However, you first need to know if your variety is PLH resistant. Often farmers can not remember. The Cornell Guide has a table of disease ratings for several alfalfa varieties and whether or not they are PLH resistant. Call me for a copy of this table. Right now I am seeing moderate amounts of common leaf spot, and some downy mildew and Lepto leaf spot. **Second and third cuttings are running into each other.** What should you do? Check for PLH and determine if you need to harvest to control this pest. **Right now, insect diseases are beginning to reduce populations of aphids and PLH.** This is due to the wet weather. If it continues, PLH and aphid populations may crash. If PLH will not damage an aging 2<sup>nd</sup> cutting field, then maybe you should go for the better quality 3<sup>rd</sup> cutting, since haylage quality is suffering again this year.

**Field Corn:** Corn is growing well. Corn rootworms, both the northern and the western are out feeding on silks. I am finding larvae and pupae in the soil when I pull up roots. Adult emergence will continue for a couple of weeks. To see if your rootworm insecticide is working, pull up a few roots and look for feeding damage. Healthy roots are white. Roots that are eaten will have feeding wounds, may be broken, and turn brown at damaged areas. A few eaten roots is normal, even when you use an insecticide. I have seen only a couple of leaf spots from disease – probably Helminthosporium leaf spot.

## **VEGETABLES**

**Drip Irrigation Under Plastic:** Soils under black plastic can become very dry in a short period of time under hot, dry conditions and with mature plants. With the common drip tape used in vegetable production (a flow rate of 0.45 gpm per 100 ft), mature crops under hot summer conditions should be irrigated 14 to 21 hours per week. This is equivalent to 2-3 hours per day. (LI Fruit and Veg update)

**Aphids In Peppers:** Flare-ups of aphids can occur in fields treated with a pyrethroid. We have seen this several years ago where permethrin was applied for corn borer control, especially after

repeat sprays. After using a pyrethroid in peppers (Asana, Warrior, permethrin, Mustang Max, Baythroid) be sure to check for aphids over the next week or two and apply a labeled material (Assail, Fulfill, Lannate, Provado; for green peach aphid only: Orthene, MSR) if needed.

**Leafhopper control in potatoes** from Admire applied at planting usually drops off around now. Scout your fields. If only leafhopper adults (the ones that hop) are seen they may be recent migrants into the field. If green nymphs are on the undersides of leaves then the Admire's no longer working. – OWYS Veg Update

## **Vegetable Pest Status Report July 16, 2004** By John Mishanec, IPM Vegetable Program **Vine Crops**

**Powdery mildew (PM)** is not an aggressive disease. It appears on plants producing a lot of fruit, under stress or in decline. It appears in summer squash first. Few growers spray fungicides on their summer squash but prefer to move to another planting when that one declines. Try to have some distance between various planting of vine crops as this will help slow the spread of powdery mildew to the successive plantings. Turks turban will always have problems before any other vine crop and those problems will spread to the other vine crops easily so keep it separated. The last week of July, scout your pumpkin fields for early signs of PM. Look on the undersides of the leaves. The first PM you will find will be a small, quarter inch size white spot on the leaf underside. On the top of the leaf, you will see a pale yellow spot the same size. As the disease gets going, the undersides of the leaves and eventually the surface will be covered with the powdery white spores. For organic growers, a good option is sulfur but try not to apply when temperatures are greater than 95F to avoid crop burning. Other options for organic growers are mineral oil and potassium bicarbonate. See June 29 Ag report for PM control recommends.

Also being found on pumpkins is alternaria leaf spot. This is the same disease as early blight on tomatoes. Spots are about a quarter inch in diameter, with concentric rings from the center of the spot. They are bronze colored. Fungicide sprays will control the disease. Quadris or Bravo work well.

One last thing to remember with your vine crops. If the rains continue and you get flooding in a pumpkin field, it is probably best to abandon that spot and not take the risk of spreading phytophthora blight to the rest of the field with your tractor. Phytophthora is a very serious problem in a wet year. In flooded areas, it may be advisable to disk a ring around the water to help contain the spread of the disease.

## **Sweet corn**

Continue to scout whorl stage corn just prior to tassel. Spray when 15% of the plants are damaged, you will want to time your spray when 40% of the field is just coming into tassel. Early tassel is the absolute best time to time a spray to get good insect control in sweet corn. Since most fields do not tassel at once, you will need to come in with a second spray once the rest of the field is in tassel.

For the past 5 years, we have caught corn earworm (CEW) the week of the 4th of July. This year, at least in eastern NY, we did not. We did catch a few in Orange County the week of the 12th. We have not caught CEW in the Capital District. Throughout the state, we are catching very low numbers of CEW in spots. There is a belief that CEW are over-wintering in NJ and Long Island but nothing is confirmed. Since CEW is migratory, and there have not been a lot of storms originating from the south, it is possible the few CEW being caught are coming from our

near by neighbors. In any case, be aware that there are low numbers of CEW around. We are not catching european corn borer (ECB) yet either. Usually, the last week of July is when we start seeing the second generation of ECB. Once the second generation of ECB starts, the grower has a lot less options for managing the corn.

Lastly, in sweet corn, we are noticing a build up of aphids. While not causing direct damage to the crop, they can still cause economic damage. For aphids, scout your fields at least 2 weeks before harvest and if you have greater than 50% infestation a control is called for. Unfortunately, there are no really good products that eliminate aphids in sweet corn. Metasystox and Penncap-M work pretty well but Penncap is very toxic to bees so spray at a time to avoid bees being in the field. Also be aware that Metasystox has a 7-day harvest interval.

### **Potatoes**

If you have yet to spray your potatoes with fungicide, get out there and get the plants covered. No plant is too small. A five to seven day spray schedule is recommended. Scout your fields for late blight. Late blight lesions are large, dark green to black colored and about the size of a half-dollar. In the morning, before the humidity drops, you will see a ring of white spores around the lesion. Sometimes, if protective fungicide sprays have been applied previously, you will not see the lesions on the leaf but late blight spores can germinate at the axle of the leaf to the stem, turning the stem black for an inch above and below the axle. Check fields regularly, especially in poorly drained areas, along spray tracks that collect water and where high humidity hangs on along tree lines.

Here are some fungicide options for late blight: Late blight inoculum will be Ridomil-resistant. Therefore, growers should not depend on Ridomil for late blight control. The key for late blight control is to use any of the following materials in a preventative manner. According to Tom Zitter at Cornell, Bravo Weatherstik has long been an industry standard, and if used at the very early stage of disease development can be quite effective. The newer formulations of Dithane DF Rainshield and Manzate 75DF will provide growers with good control under times of less intense disease pressure. Metiram (Polyram) plus triphenyltin hydroxide (Super Tin) have a place in mid-season sprays when disease pressure from late blight and early blight are less intense, and this combination can be alternated with other fungicides. For organic growers, several fixed copper fungicides are available (Basicop, Champ, Kocide, etc.) and provide fair control of late blight and early blight, again if used preventatively. These and other copper products are registered for use on both potato and tomato.

Colorado potato beetle (CPB) larvae are big. When the larvae are about the same size as hard shell adults, it is about the last chance to control them. If the large larvae are allowed to become adults, it will be nearly impossible to control CPB for the rest of the season. You will have all the different generations in the field at the same time and your insecticides will not be able to cope with the pressure. Get out there and control the large larvae. Now! If you did not use Admire at planting, than Provado is a good choice. Remember it can only be used twice to avoid resistance. Spintor works very well against CPB. After that, Pounce, Asana and Ambush are good choices. If you have already used one of these three, try a different one.

**Tomato diseases found: White mold** can come in through spores in the air, on seed and it can be in the ground from previous infestations. Stems on tomatoes dry up and turn tan colored. Plants will be affected randomly through the field. If you open up the stem, you will find white fluffy growth and little black fruiting bodies that look like grains of black rice. These are called

sclerotia. They can stay active in the soil for 5 years or more and re-infect susceptible plants. At this point Tom Zitter at Cornell recommends removing infected plants from the field. Be careful when removing them, as you do not want to spread the sclerotia through out the field or around your farm. Put infected plants in a bag and remove them from any area where you will likely grow vegetables. There is nothing you can spray to help slow down the disease.

**Phytophthora** This disease is one of the most difficult to control as it stays in the ground for a long time and has a wide host range from vine crops to tomatoes. Plants grown from seed will damp off while transplants will have the stems turn black and the rest of the plant dry up and die. Again, Prof. Tom Zitter recommends removing the infected plants from the field, as we are sure to have more wet weather and it can only spread the disease if they remain in the field.

**Bacterial canker** Leaves have black margins and plants with the disease are spotty throughout the field. Keep the plants well covered with copper compounds and hopefully you will be able to harvest good fruit.

### **Landscape:**

Phytophthora on Wave Petunias was reported in the mid-Atlantic area and remains a problem in beds that are planted year after year with petunias. I bring this up again, because we have seen a few landscape beds that are looking poor – so far no sign of *Phytophthora*, but it should at least be considered. The Plant Diagnostic lab in Maryland diagnosed *Phytophthora* crown rot on wave petunia specimens submitted from institutional landscapes. Symptoms seen were sudden wilt and death of plants. When pulled out, the plants look like they have a good root system. Some crown rot (mushy, tan discoloration in crowns) can be seen. Microscopic examination found mycelium and sporangia of the fungus *Phytophthora parasitica*. This fungus was isolated in cultures from the dying plants. Management: Once many plants are infected in the planting, they cannot be revived, and fungicide drench will be futile. It will also be discouraging to re-plant this season with a susceptible crop. Bear in mind that Madagascar Periwinkle (*Catharanthus roseus*) is also susceptible to *P. parasitica*. Also susceptible are flowering tobacco, peppers and tomato. The fungus will persist on plant debris and in the soil. If only a few plants have wilted, fungicide could be used as part of re-planting with petunias. SubdueMaxx; Aliette or Alude could be used. Some other ideas to re-plant a site infested with *Phytophthora parasitica* include the following plants not reported to be highly susceptible: marigold; impatiens; begonia; chrysanthemum; coreopsis; dianthus; geranium (*Pelargonium*); crane's-bill (*Geranium*); phlox; portulaca; *Rudbeckia* and *Zinnia*. This information from the TPM/IPM Report Weekly Report, University of Maryland Cooperative Extension.

Due to the heavy rains seen in parts of the county we are starting to see problems with plants usually assumed to be problem free. One of them that I have had several calls about is Globe Thistle or *Echinops*. This plant is normally thought to have very few problems, but in heavy soils and high moisture it can experience crown rot caused by *Pellicularia* and stem rot caused by *Sclerotium*. Both of these rots may be controlled by fungicidal drenches, but improving soil drainage in the planting site would probably make the most long-term sense.

Now is the time to get after yellow nutsedge, one of the more difficult weeds to control. Two herbicides are available for the job. Basagran, with the common name bentazon, can be applied now with a follow-up application if needed in 10 to 14 days. It may injure ryegrass if used at the

high rate, especially in hot weather. Manage, or halosulfuron, is a newer material which may provide very effective control in one application.

For those who are unfamiliar with nutsedge: Be on the lookout for this greenish yellow, grass-like plant. It has heavy, three-angled stems and leaves, and stands out when seen in a nicely maintained lawn. It may also be found in landscape beds. It spreads via underground rhizomes, at the end of which form tubers. A single plant may produce thousands of tubers! Nutsedge also has a coarse, brush-like seedhead. Pulling nutsedge out of the ground is often not an effective control, since the stems and leaves break off and leave the tubers behind. (This turf information is from David Chinery, the turf specialist for CCE Rensselaer County, and was printed in the June 24 issue of the Capital District Growing Trends newsletter.).

Sincerely,

Aaron D. Gabriel  
Extension Resource Educator  
Crops and Soils