Washington County Ag Report
June 29, 2004

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

"A genius is a talented person, who does his homework." -- Thomas Jefferson

Announcements

FIELD CROP SCOUTING, COME EARN A PESTICIDE RECERTIFICATION CREDIT BY SCOUTING WITH ME FOR ONE HOUR: ***No scouting again until July 13***

Wed., July 7, 9:30– 2 noon – Field Crop Weed Control Field Day at Valatie Research Farm – CCA and Pesticide Recertification Credits. State Farm Rd., off Rte 9 north of Valatie. AG
Thurs., July 8, 9:30am – Seed Growers' Field Day – CCA and Pesticide Recert. credits. Tour plots of winter grains, spring grains, and see crop disease simulation and the alfalfa breeding program. At NYSIP Foundation Seed Barn, 791 Rte 366, Ithaca. Call Pam Kline, 607-255-2177.
Thurs. July 8, 5pm Potluck and 6-8pm Tour at The Alleged Farm Sustainable Network Gathering. Weed Management Tools and Challenges and High Tunnel Tomatoes. 209 Cooke Hollow Road, Valley Falls. Contact RFFP 518/271-0744 for more info.
July 13 – NYS Farmer's Direct Marketing Association Summer Bus Tour in the Finger Lakes Region. For more information or to register contact Diane Eggert at 315-475-1101 or diane99@dreamscape.com.
July 14 – Cornell Vegetable Weed Science Field Day, H.C. Thompson Research Farm, Freeville, NY; 9:30 – 2 pm. Pre-registration ($14.00 includes coffee/beverage, doughnuts, lunch, and informational trial packet) is due by July 8th. Contact Sue Thompson at 607-255-7889 or sdt1@cornell.edu. CCA and DEC credits available.
Wednesday, July 28, 9a.m. -3p.m. – 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 25th.
Monday, August 9, See What's New with Manure Management Tour – Ridgecrest Dairy, Genoa; Fessenden Farms; Dairy Support Services (mobile draghose demonstration), and Cornell Manure Compost Facility. See McClanhan sand-manure separator, Integrity liquid-solids separator, dissolved air flotation system, forced-air composting, vermicular processing, and more. Call Northeast DairyBusiness to register ($10) at 800-334-1904, Ext 222. *I will be taking a van out to the tour. Call Aaron for a seat, 800-548-0881. Leave 1st Pioneer in Greenwich at 6:30 am and return at about 9 pm. Bring a couple dollars for gas & dinner money.*

New York State Energy Research and Development Authority (NYSERDA) seeks proposals that focus on optimizing the operation of farm waste management systems that will allow future implementers to increase production of biogas and increase the efficiency of energy use in

composting and other farm waste management systems. Call Karen Whalen by FAX at 518-862-1091, or email at kew@nyserda.org. More info is at www.nyserda.org.

The USDA has a Notice of Funds Available (NOFA) inviting applications for the Renewable Energy systems and Energy Efficiency Improvements Grant Program through Rural Development. Information is at http://www.rurdev.usda.gov/rd/nofa/2004 or call Scott Collins at 315-477-6409.

Speeches and presentations from the **Renewable Energy and Agriculture Conference Proceedings** are online at http://www.ef.org/umenergy.cfm. Topics addressed by the conference sessions included wind and biogas energy, energy transmission and marketing. (Excerpted from The Weekly Harvest - Sustainable Ag News Briefs (6/2/04))

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
Rain Past Week	**0.60**	0.67	**0.60**	1.00	**0.22**	0.51	**0.80**	0.00
So far this month	**1.51**	3.59	**1.30**	4.45	**1.48**	3.77	**1.84**	1.60
Total since April 1st	**10.18**	9.38	**10.50**	10.51	**9.71**	10.08	**12.24**	7.74
GDD Base 41 Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	**164**	228	**171**	226	**184**	240	**176**	229
Since April 1st	**1427**	1394	**1537**	1468	**1667**	1605	**1482**	1427
GDD 86/50 [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	**107**	160	**119**	154	**122**	169	**118**	148
Since April 1st	**961**	931	**1063**	1009	**1108**	1076	**1032**	983

Midwest Commodity Prices - from the Wall Street Journal

Corn per bushel	$2.61/bu	Cotton Seed Meal per ton	$185/ton
Soybean per bushel	9.01/bu	Corn Gluten Feed	72/ton
Hominy Feed per ton	84/ton	Wheat, soft white	4.1/bu
48% Soybean meal per ton	302/ton	Tallow per pound	.20/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.

DAIRY NOTES:

Summer is upon us and with it comes the onslaught of hot and humid temperatures, which can wreak havoc on your cows. Preventing heat stress is always of concern during this time of year but some producers do not correlate humidity with higher incidences of mastitis.
Bacteria flourish in warm and moist environments and become the main ingredients for an increase in frequency of clinical mastitis. A strict milking procedure alone is not enough to

defends cows against these environmental pathogens during times of hot and humid temperatures. Steps like frequent scraping of dairy facilities, clipping or burning udder hair, improved maintenance of stalls, and improving pasture and waste water drainage can lower the incidences of mediums that grow bacteria. This is a busy time of year with forages being harvested but if little steps are taken to improve environmental conditions during times of heat stress and high humidity milk production will not be compromised.

FARM BUSINESS MANAGEMENT: This is the last Ag Report of June and the celebration of "June is Dairy Month", so I thought that I would add a few comments. After devastating low prices, the dairy industry has seen an upsurge in the mailbox dairy price. However, as always, this is accompanied by an upsurge in the retail market price of fluid milk. Definitely a challenge to face, but more of an issue has been the press that heralds the price rise. Keep thinking about the impact you have on your community and talk to people about it. No matter what kind of agriculture someone is in, we all have to remind the non-farm public of their need to eat safe wholesome food. Maybe this will help the next time the lead story is "Family reducing milk purchases because of unfair price". Marketing of the industry needs to happen more than one time per year.

CROPS

Notes from the Eastern New York Field Crops Pest Report 6/22/04

Alfalfa: Alfalfa Weevil This year, while monitoring alfalfa weevil I have seen very few larvae reach the 4th instar. I kept waiting and this week there was not a single alfalfa weevil in the field. I looked for pupa all curled up in the leaves and found very few. I did see a lot of larvae infected with a fungal pathogen this growing season. The fungus is *Zoophthora phytonomi* and the epidemics it may cause are favored by wet conditions like those we have had this season. When weather conditions favor *Zoophthora phytonomi* it can kill about 60% of the larval population. This **might** be the reason why the alfalfa weevil infestations were low.

Damsel Bugs Every year, I see many damsel bugs in the sweep net when monitoring alfalfa. Damsel bugs, also known as nabids, eat small insect eggs as well as aphids and mites. This insect uses a needle like mouth-part to insert into its prey and suck out the insides. They are slender, often yellowish-brown and about 8 -12 mm (3/8 to 1/2 inch) long. The wings lie flat across the back, crossing at the tips. The abdomen is slightly swollen and the body tapers toward a narrow, elongated head. The adult female inserts white colored eggs into the stem of the plant --only the egg cap shows. Damsel Bug nymphs are a little smaller than their parents but otherwise resemble wingless adults in shape and color. Be a little careful with damsel bugs because they are predators and can give a painful bite to big and small alike.

Potato Leafhopper Populations Remain Level Talking with other extension educators this week has confirmed what I have also been seeing regarding PLH populations-they seem to be static, still well below action threshold. Remember, potato leafhopper infestations can vary greatly from field to field. Checking all fields on a farm is important even if the first one you monitor might be below threshold. For management information check our on-line IPM guides: IPM for Potato Leafhopper in Alfalfa.

Field Corn: White Grubs Found in Fields During a TAg meeting in Lewis County last week we discovered white grubs in corn fields. White grubs are the larval form of Japanese beetles, May or June beetles, or European chafers - all types of scarab beetles. White grubs are thick, white soft-bodied larvae about 1/4" to 1" long, and curl into a C-shape when disturbed. White grubs can be a problem in 1st year corn after sod, feeding on the roots of corn plants. Symptoms are gaps in cornrows at time of emergence and wilted, or stunted seedlings. There are no control measures for white grub. These insects are seldom an economically significant problem for corn in NY. For more information checkout our online publication: Early Season Field Corn Insect Pests

Stand Reductions by Early Season Corn Disease Kevin Ganoe reports nearly 1/2 to 1/3 population reductions in some local corn stands due to seedling diseases. It may be too late to do anything about the problem now, but highlights a possible management opportunity for next year, Prevention is the key to control early season corn diseases! By using a fungicide/insecticide planter box treatment will help prevent corn seed from many different early season diseases and seed corn maggot too. Sound planting practices, such as use of certified seed, good seed bed preparation, good seed soil contact, and appropriate planting depth, help promote stand establishment and help avoid seedling blights and emergence diseases. For more information checkout our online publication: http://www.nysipm.cornell.edu/publications/corn_dis.pdf

Weed of the Week: Common Ragweed is Resistant to What? Walking through a few cornfields this week I found healthy populations of common ragweed. According to predicative models 100% of common ragweed have germinated and emerged in NYS. Common Ragweed (*Ambrosia artemisiifolia*) is a dicot weed in the Asteraceae family. The interesting thing about this weed is that populations of it have been found to be resistant to triazine herbicides in New York. This does not, however, mean all the common ragweed we encounter is triazine herbicide resistant. It means that under certain management practices when triazine herbicides are used extensively there is the potential that some individual plants may survive. These survivors produce seed and a portion of that seed is also resistant, thus contributing to a triazine resistant ragweed seed bank. In other parts of the country some common ragweed populations have been found to be resistant to some acetolactate synthase (ALS) herbicides. It is important to use different families of herbicides each year to prevent your common ragweed from developing resistance to any one type of herbicide. Don't forget there are other weed control options than using just herbicides alone; like using a combination of cultivation and just banding herbicide over the corn rows. The better stewards we are regarding pesticide selection and use the more likely we will have effective materials available when we need them.

Soybeans: Soybean Aphids Found in Western NYS Soybean aphids have been reported on soybeans in Western NYS. The one field I have access to does not have soybean aphids yet. Soybean aphid (SBA) is the only aphid that attacks soybeans in the United States. This aphid is very small at a 1/16 of an inch long when fully grown and may be yellow to yellow-green in color. SBA have two black-tipped tail pipes or cornicles that can be seen easily under a hand lens. They tend to colonize and are found on the under side of the leaf. The threshold for soybean aphids is 250 or more per plant through the R4 stage. To make the best decision you should take

an average aphid count from 20-30 plants per field. This threshold allows for about 7 days for treatment action. For more information on managing insect pests on soybean check out our on-line publication: Soybean Insect Pest Management Guide

VEGETABLES

GAPS (Good Agricultural Practices): Pets and animals carry many parasites, bacteria and viruses that are transmittable to humans. Everyone on the farm from harvesters to packers should wash their hands after handling pets or animals and before they handle produce. Contaminated food can readily cause illness in customers who are sensitive, such as children and the elderly.

Beware of Calcium Deficiency During Dry Conditions: Much of the calcium taken up by plants moves to the roots with the soil moisture. Under dry soil conditions less calcium is moved to the root surface thereby reducing uptake. The other factor contributing to calcium deficiency is reduced transpiration from leaf surfaces, which normally moves calcium into and through plants. Calcium tends to move preferentially to those parts of the plants that have the highest transpiration rates, generally the outer leaves. As a result, the fruit and interior parts of the plant receive less calcium. In tomatoes and peppers blossom end-rot (usually calcium deficiency in the blossom end of the fruit) results when there is a lot of vegetative growth and/or high transpiration conditions (hot weather). Under these conditions insufficient calcium is being taken up to meet the needs of the whole plant (vegetative + fruit). Similarly in cabbage and lettuce, internal tipburn occurs because the transpiration rate of the interior leaves is low and so less calcium moves into these plant parts. Blackheart in celery occurs in the same way. Calcium deficiency or disorder is best dealt with in a preventative way because once it occurs the quality of the marketable vegetable product cannot be reversed. Foliar application of calcium to supply 2 pounds per acre prior to the onset of hot dry conditions will help by improving the calcium status of the whole plant. For cabbage and lettuce, application is best done prior to the formation of the head. Blossom end-rot is most likely to occur on the first set fruit because the vegetative growth rate at that time is quite high. Applying calcium near the time of first fruit set will help. Maintaining adequate soil moisture is the best way to minimize the occurrence of calcium deficiency related disorders. Applying supplemental calcium to the soil will increase the concentration of calcium in the soil solution, but adequate soil moisture is still essential. (edited from an article by *Darryl Warncke, Crop & Soil Sciences, MSU*) Note: Even with adequate soil moisture uptake can be low when transpiration is not occurring such as in greenhouses or high tunnels with high humidity from inadequate ventilation. (CC)

Cucurbits: The NYSDEC has approved a FIFRA 2ee for the use of Bravo Ultrex, Flint, and Amistar to control Plectosporium tabacinum, which causes **Plectosproum blight,** on Curcurbit crops (cucumber, melon, summer squash, watermelon) grown in New York State A copy of the NYSDEC approved letter and label is accessible from:
http://pmep.cce.cornell.edu/profiles/fung-nemat/aceticacid-etridiazole/chlorothalonil/index.html

Plectosporium blight: A new disease of cucurbit crops to prepare for Meg McGrath, LI Research Center (Full article on-line at http://vegetablemdonline.ppath.cornell.edu)

Plectosporium is a new, potentially devastating disease. Pumpkin, squash (especially zucchini) and gourd are susceptible. In 2000 in IL symptoms were found in all pumpkin fields examined and yield loss was as much as 50%. Severe losses occurred in 2003 in CT and MA, where the disease was confirmed on 7 farms and in several home gardens, probably because rainy weather provided favorable conditions. Two of these farmers reported total loss of their squash (yellow and zucchini) and pumpkin crops. Once observed in a state, Plectosporium blight usually has reappeared in following years, unless weather is unfavorable for disease development. It now occurs routinely throughout TN and VA. Plectosporium blight can disappear after conditions become dry because the pathogen is highly dependent on rainfall. Spores of this pathogen are dispersed by wind and rain.

Symptoms occur on leaf veins, stems, and fruit. Lesions are white and have a very distinctive diamond to spindle shape that is characteristic for this disease. They are small initially (<1/4 inch), but can expand and coalesce, causing the entire surface of stems, leaf veins or fruit handles to turn white. Leaf tissue between veins is not affected, thus early symptoms are not as apparent as with other foliar diseases. Leaves eventually die and collapse, often in a 10- to 25-ft diameter circle around the site of initial infection. Dead vines can be so brittle they shatter when stepped on. Spots are more circular on fruit, and they remain small and don't coalesce.

Management begins with rotation because the pathogen can survive in soil. The minimum effective rotational period has not been determined; at least three years is recommended. Since disease development requires leaf wetness, irrigate with drip, time overhead irrigation to minimize leaf wetness and scout fields after rainy weather. Carefully inspect any pumpkin fruit brought onto your farm to re-stock pick-your-own fields. Affected fruit typically do not breakdown.

In NY Plectosporium blight is listed on the Dithane DF Rainshield label. The fungicides listed before this article can also be used. Several fungicides are effective for Plectosporium blight (see full article for table). Flint has performed a little better than Quadris (the active ingredient, azoxystrobin, is now marketed as a new formulation called Amistar).

Suggested Fungicide Program for Powdery mildew, Plectosporium blight, Black Rot and Other Pumpkin Diseases 2004. Begin when powdery mildew is detected at the action threshold of 1 leaf with symptoms out of 50 older leaves examined.

Week 1-Flint or Amistar + Sulfur or another contact fungicide.
Week 2-Nova + Bravo or another chlorothalonil product.
Week 3-Sulfur. Add Flint or Amistar if control of powdery mildew on the underside of leaves is very good indicating that resistance is not affecting control. Alternatively Topsin M or Bravo could be used.
Week 4-Bravo. Add Nova if still little powdery mildew on leaf underside and couple more weeks of powdery mildew control desired.
Additional sprays- Sulfur. Add Bravo or copper if diseases other than powdery mildew are a concern.

Solanaceae: Starting to see a little leafhopper burn in some fields with the high populations we have encountered this year. If you haven't already applied your protective fungicide sprays, now

is a good time to start. Late blight can strike with the wet weather. Keep applying weekly as the new growth needs to be protected. *(John Mishanec's Veg Pest Status Report 6/25/04)*

Sweet Corn: Farther south in Orange and Ulster county, the ECB larvae are large and fairly developed. Many fields are in the 50-60% field infestation level. Farther north, from the Capital District north, larvae are a little smaller but still coming on strong. Scout your fields and if you are over 15% infestation, than you are ready to wait for tassel. When the flag leaf pulls away from the tassel and the individual tassels are still upright, this is the perfect time to spray. Wait 4-5 days and then apply a second spray as a field never comes into full tassel at once. If you are an organic grower, Entrust, the organic formulation of Spintor works very well. With the thunderstorms that have been coming up from the south, I expect we might start seeing some Corn ear worm (CEW) within a week. We will be putting traps out and scouting for them. *(John Mishanec's Veg Pest Status Report 6/25/04)*

From PestMinder (WNY) 6/16/04: Some early planted fields are still uneven. Some stunted plants have leaf tips that are tinged blue or purple. Consider digging up the plant and checking the roots for insects – you may have wireworm that can prune the roots.

Sincerely,

Aaron D. Gabriel
Extension Resource Educator
Crops and Soils