

**Washington County Ag Report
May 11, 2004**

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

Quote

“The key to change ... is to let go of fear.” -- Rosanne Cash

Announcements

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

Tuesday, May 18 at 11 am, Black Creek Valley Farm, meet a shop, intersection of Rte 30 and Black Creek Rd.

Saturday, June 12th, 9-4, Christmas Tree Growers Workshop, Sunny Crest Tree Farm in Kingsbury. NYS DEC Pesticide Credits will be available. Cost is \$30/person. Pre-Register by June 10th. Call 668-4881 to register.

FYI:

"Opportunities in Agriculture: Diversifying Cropping Systems" 20 pg. free bulletin provides info farmers need to choose new crops and manage them successfully. While some alternative crops command high prices, others build natural resources or boost yields of rotational crops. Includes sidebars about five successful diverse farmers, sections on agroforestry and the environment, and a list of additional resources. Order free print copies by calling 301/504-5236 or e-mailing san_assoc@sare.org.

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	0.56	0.68	0.68	0.50	0.46	0.36	0.70	0.10
So far this month	1.34	1.02	1.03	0.80	0.59	0.70	1.11	0.55
Total since April 1 st	3.24	2.79	3.92	2.90	2.72	3.78	4.88	2.61
GDD Base 41 Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	72	127	98	132	88	148	65	93
Since April 1 st	291	329	391	377	428	423	334	353
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	33	83	56	89	57	93	51	64
Since April 1 st	210	237	274	284	276	291	262	274

Soil temperature on 5/11, 11:30 am, sunny, at 4 inches deep, was 68°F.

Midwest Commodity Prices - from the Wall Street Journal

Corn per bushel	\$2.85/bu	Cotton Seed Meal per ton	\$220/ton
Soybean per bushel	10.16/bu	Corn Gluten Feed	83/ton
Hominy Feed per ton	84/ton	Wheat, soft white	4.28/bu
48% Soybean meal per ton	330/ton	Tallow per pound	.2/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: Lately we have been experiencing warm and humid temperatures in the county when ventilation systems for dairy facilities are still in hibernation. Naturally ventilated systems are easy to get ready for the heat stress season but fans, the heart of mechanically ventilated systems, need a little more attention. Fans operating in dairy barns and milking facilities are exposed to vast amounts of dust and moisture, and accumulate dirt on blades, louvers, and shrouds. Dirt on fan blades has little or no effect on fan performance, but dirt on louvers and guards can reduce airflow by as much as 40 percent. Fan louvers and guards should be cleaned regularly and lubricated (using graphite to prevent dirt accumulation) to prevent large airflow reductions in fans. Louvers should be removed where fans are running continuously to avoid the potential for restricting airflow, but guards should remain in place to prevent personal or animal injury. Not only is the environment in a dairy barn dirty, but there are corrosive gases, especially in facilities with manure pits inside the facility. Continuously running fans or fans that exhaust from pit areas need a non-corrosive housing, such as fiberglass, to prevent deterioration. Whether a simple switch or a microprocessor controls the fan, those controls should also be protected from the environment by a watertight and dust tight electrical box to eliminate electrical contacts and switches from being exposed to corrosive gases. Although fans are a necessary part of a ventilation system, they are not the only things to consider. Also needed is some way to bring air into a negative pressure system (inlets), or to allow its escape in a positive pressure system (outlets). In both instances, a standard rule for sizing air openings is to provide one square foot of area for every 800 cfm of fan capacity.

FARM BUSINESS MANAGEMENT: Two items for discussion today. Reassessments on property – several people have called to discuss the topic which can have a tremendous impact on farm overhead expenses. Based on info that I have from town assessors that have attended previous Tax Assessor trainings – make an appointment, do your homework and show why you need to change the assessment number. Taking time to grieve the process could only help and it would not be unusual. The other is an update from Judy Littrell and Julie Suarez of NY Farm Bureau. It appears that Dept of Labor is going to be doing workplace inspections in the coming weeks and months – make sure you are in compliance – posters, work agreements, paperwork. It will make your life easier. Call if you need more info before the Farm Bureau alert comes out.

CAFO: The following website by the “Livestock and Poultry Environmental Stewardship Curriculum, provides fact sheets about the federal CAFO regulations at, <http://www.lpes.org/CAFO.html>. You can print the PDF files for free. Each state modifies the federal standards. The site for forms and information about the NY CAFO regulations are at <http://www.dec.state.ny.us/website/dow/bwp.htm>.

CROPS

Alfalfa: Using the “alfalfa stick” I estimated the neutral detergent fiber (NDF) to be 31%. Depending on the weather, alfalfa will accumulate 0.5 to 1.0 percentage points each day. **So pure alfalfa should be at 40% NDF between May 20 and May 27.** We caught our first **alfalfa weevil** adults today - just one adult in 10 sweeps of the net. The action threshold is based on the amount of feeding damage done by the larvae. No larval feeding was seen. Leaf spots remain at low levels. Ken Wise (Eastern IPM Specialist, Cornell, courtesy of ISU and NY IPM)) has provided some links to images of the three leaf spots we see most often in alfalfa:

[Leptosphaerulina Leaf Spot](#)

[Common Leaf Spot](#)

Spring Black Stem



Field Corn: Corn planting has started out slow, but I expect it to be at full pace during every window of opportunity for the next few of weeks. **Start resigning yourself now, that first cutting will interrupt corn planting. You will make more money by putting up great haylage and letting corn planting wait a week or so.** Last year’s haylage was mediocre overall because of weather. Wouldn’t you like to have great haylage this year? You should be applying 30 lbs. of nitrogen in the starter fertilizer on every corn field. Apply phosphorus and potassium according to the soil test. Or more simply, apply P & K on fields with little or no manure; and no P or K on heavily manured fields.

Keep soil pH above 6.0 for corn. Soil pH affects herbicide activity, especially for triazines, like atrazine which is present in the Bicep formulations. Triazine activity declines when pH falls below 6.0. Perhaps weed escapes are due to spots in the field with low pH. Soil pH is one of the factors that can vary most within a field. I have measured soil pH’s from 6.2 down to 4.5 in the same field and only a hundred feet apart. Rather than grid sample your field for pH, as would be done for precision agriculture, identify areas in each field that has poor weed control and measure the pH in those areas. *I have a soil pH probe that is fast and accurate. All I do is push it into the soil and wait 60 seconds or less for a pH reading. Call me to check the pH of weedy spots in your field.*

Also, I was asked about controlling burcucumber (and wild cucumber) in field corn. Plan on using atrazine for pre-emergent control and a post-emergent herbicide. Exceed is suggested by Russ Hahn (Cornell). Apply when burcucumber is 1" to 8" tall. The rotation restrictions for Exceed can be quite long for some crops, so read the label as always. These two weeds are

annuals and reproduce by seeds. The seeds are large and can emerge from a few inches deep. Planting no-till corn in infested fields may help control, because there will be fewer flushes of germination. Post-emergent herbicide will then be more effective on weeds of similar age. Also, the seeds mature late in the year and ensiling kills *immature seeds*. So early harvest or destroying vines before seed maturation, will help reduce the seed going into the soil.

Grasses: Native orchardgrass is beginning to head. Commercial varieties are not yet at the boot stage. **I expect orchardgrass to be ready for harvest in about 4 days or so.** The maturity varies considerably among varieties. So check your fields that are predominantly orchardgrass. Today I took a sample for analysis, after we got a few hours of sun. Hopefully, we will have the results for the next Ag Report. I will take a sample of reed canarygrass in a couple of days. I am *guessing* that reed canary and brome grass will be ready for harvest on May 21 (shooting for 55% NDF). **Bedstraw** is a troublesome weed in many hay fields. If the field is mostly grass, then you can use Crossbow herbicide to kill the bedstraw and all other broadleaf weeds and forages (clover, alfalfa, trefoil). It may not be harvested for hay until 14 days after treatment. Lactating cows may not graze it until next season.

Birdsfoot Trefoil: You may remember that in 2002, we planted a field to Pardee trefoil, Exact trefoil, and red clover. This was a demo plot to see how well the new varieties of trefoil perform. It was very dry when the trefoil was planted in July 2002, and through the month of August 2002. So the stand came out fair. First cutting in 2003 was decent for all the plots. But then, all the summer rain that fell in 2003 stimulated a lot of crabgrass and foxtail, which outgrew the trefoil and much of the clover. This spring, there is very little trefoil or clover left. We will take another look after first cutting to see what remains. This bad experience does not mean that we should forget about trefoil. I think that it deserves another chance. Other folks are having good success with it.

VEGETABLES

Suggestions for Reducing Off Site Movement of Admire in Vegetables: Cornell Cooperative Extension of Suffolk Co. and Bayer CropScience have developed Best Management Practices (BMPs) for use of Admire due to the detection of this product at very low levels in the groundwater. Contact your dealer for a pamphlet.

- **Mix and load concentrated material carefully:** Choose a level area at least 25 feet, with at least a 15-foot vegetative strip, between the mixing/loading area and potential surface-to-groundwater conduits such as field sumps, uncased wellheads, sinkholes, recharge basins and bodies of water.

- **Clean up spills promptly and dispose of properly:** In the event of a liquid spill, promptly spread an absorbent material such as sawdust or cat litter and dam around the spill. Do not allow the material to wash into drains, recharge basins, or similar areas where there is a high risk of leaching or runoff. Sweep or shovel the absorbent material into a heavy-duty plastic bag. For areas where soil needs to be removed, immediately shovel the saturated soil into a heavy-duty bag and cover area with fresh topsoil. Contaminated soil and absorbent material can be disposed of normally.

- **Calibrate and maintain application equipment:** Be sure treatment rates are accurate. Use no-drip nozzles and be sure application equipment is in good working condition without leaks.

- **Limit the frequency of use:** Unless consistent cucumber beetle infestations exist you might not need preventive Admire® treatments. Inspect untreated, young plants twice weekly.
- **Limit application rates:** While there may be somewhat shorter residual control, use of lower rates will reduce the amount of material applied per area thus decreasing the potential risk of off-site movement. For cucurbit (vine) crops, consider limiting Admire® use to 16 fl oz/A (1.1 fl oz/1000' of row based on 36" row spacing). Again, pest species to be controlled, crop density, plant size and required length of residual control should be considered for determining the rate used.
- **Application method and timing:** Avoid applying Admire® to the uncovered soil surface. Apply Admire® in-furrow below the soil surface in contact with the seed in a 2-4" band (i.e., the width of the planter shoe) and cover completely.
- **Avoid leaching of the material during and after application:** Do not apply Admire® to soil or growing medium that is saturated or waterlogged or directly to water or intertidal areas. Apply when there is little chance of heavy rain within the next 24 hours. For flats, irrigate lightly for at least 3 days to allow uptake and minimize risk of leaching. When used on erodible soils, best management practices for minimizing runoff should be employed. Well-maintained grassy buffer areas have been shown to significantly reduce the runoff of pesticide residues from mixing/loading locations and from treated areas in the field. In field conditions, maintain a minimum distance of 25 feet, with at least a 20-foot dense grass filter strip for slopes less than 1 (one) percent, between treated areas and field sumps, uncased wellheads, sinkholes, recharge basins and bodies of water. The filter strip width should be increased 1.5 feet for each additional percent of slope increase. For example, in an area with 7% slope, the filter strip width should be increased to 29 feet. In extremely vulnerable sites (e.g., steep slope without dense grass cover), which lead to potential groundwater recharge areas, applications should be avoided altogether. *(Dale Moyer and Dale Gilrein, LI Fruit and Veg Update)*

Cucurbits: Using Admire on Vine Crops And Tomatoes: Admire provides excellent control of cucumber beetles (and bacterial wilt transmission) during the early weeks of establishment on vine crops. Admire can be used on cucumber, melons and watermelon, pumpkins, gourds and squashes and others. Be aware of labeled plantback restrictions for unlabeled crops. While the label allows an application rate of 16 – 24 fl oz/acre, growers should be careful about using the high label rates since at least some vine crops are rather sensitive to Admire. We suggest calibrating equipment to deliver 1.1 fl oz/1000 feet of row, which translates to approximately 17 fl oz/acre at 34" row spacing. For best results, apply in a band 2 – 4" wide in the seed furrow before covering. For other row spacings, calibrate using the following per acre rates as suggested to achieve 1.1 fl oz/1000 feet of row. (Commercial growers in New York State are now legally permitted to apply lower than label rates.)

Row spacing Rate/Acre

- 34" (2.8') 17 fl oz
- 68" (5.7') 8.5 fl oz
- 102" (8.5') 5.6 fl oz
- 136" (11.3') 4.25 fl oz

For growers transplanting some or all of their vine crops, Dr. Shelby Fleischer, entomologist at Penn State University, suggests rates for treating flats to control cucumber beetle at transplanting, applying 0.7 fl oz/20 ml per 1000 plants about 1 day prior to planting in the field. Dilute in a volume of water just sufficient to soak the soil mix evenly with NO runoff. This

treatment will protect the plants for a short period of time (about 2 weeks) and after that can be followed by field application. Water plants lightly after application to avoid leaching insecticide out of the media. For tomato transplants, a lower rate is suggested: 0.5 fl oz/15 ml per 1000 transplants. Both tomatoes (especially plum) and cucurbits are somewhat sensitive to the active ingredient in Admire: phytotoxicity – burning the plants – may occur at higher rates. (*Dale Gilrein, LI Fruit and Veg Update*)

Greenhouse: The little bit of heat that we've seen has resulted in an explosion of problems with insects. Specifically mites and aphids. When scouting, make sure to identify those plants that are always plagued and check them first. In my experience New Guinea Impatiens are mite magnets and they can be infested with red mites or two spotted mites. Aphids do not seem to be as particular, but petunias are likely candidates. The use of sticky cards is always helpful when scouting.

Ventilation is another huge concern as I visit greenhouses throughout the county. It is less of a problem as the weather warms, but since we have had such a cool, overcast season I have noticed this a lot. **You should feel air moving at the bed height all the time!** If you do not, your ventilation system is not working correctly. This doesn't mean that you need a gale force wind, but just slight movement across the tops of the plants will help enormously. I have seen only one house that has small fans suspended over the beds to insure that air moves. Another sign is that if your eyeglasses fog even for a few seconds, the humidity is too high. And last but not least, if you have water condensing and dripping you need to address the humidity promptly. If you do not get to it this season, then make it a priority for this fall to get the problem corrected. Proper ventilation will help control all kinds of fungal diseases such as Botrytis and downy mildew.

Landscape: This from Capital District Growing Trends, April 29th. In March 2004, *Phytophthora ramorum*, the fungus that causes Sudden Oak Death (SOD), was found at a large wholesale nursery stock distributor in Los Angeles County California. This should concern you if you buy from the western part of the country because the confirmed positive nursery is the Azusa location of Monrovia Nursery located in Azusa, California. The parent company has 7 other satellite nurseries throughout the United States and ships nursery stock all over the country. The Azusa location is a 500-acre facility that specialized in camellias. The disease was confirmed in two species, camellias and viburnums. This pathogen also infects rhododendrons, huckleberry, bay laurel, California buckeye as well as many other tree and shrub species. On March 9, 2004 the nursery was quarantined and all the plants linked to the SOD syndrome were destroyed. Monrovia officials estimate that over 200,000 plants were lost as well as \$4.3 million in lost sales for the month of March. Sudden Oak Death (SOD) is caused by the pathogen called *Phytophthora ramorum*. This fungal pathogen spreads through airborne or water borne spores. Symptoms include black or reddish ooze bleeding from cankers on the bark and canopies that quickly turn from green to brown. Laboratory tests must be done to confirm the pathogen since many other pathogens can cause similar symptoms. More information on Sudden Oak Death can be found at <http://www.aphis.usda.gov/ppq/ispm/sod/>.

Nuisance Wildlife in Turf:

Moles: There are three species of moles found in the northeast. The Eastern Mole tunnels are shallow, thereby causing the most turf disruption. These are located mostly in upstate NY into

the Hudson Valley. The Star-Nosed Mole and Hairy-Nosed Mole tunnel more deeply and create large mounds where they exit the soil and are the predominant species in lower NYS. Typical Mole density is two per acre and are often found in low wet areas. Moles have a diverse diet of invertebrates. A common “solution” to mole problems has been to control the soil insects (grubs). However, not only is that ineffective due to a diverse diet (they will just eat something else), it is likely to increase the damage by moles because they will have to search more aggressively to eat, thereby increasing tunneling and damage. With all the touted products for mole control on the market today, trapping remains the most effective means for controlling moles. Pressing on tunnels and observing them being raised again tells you where to place the spear trap. This is an effective approach due to the low density of moles per acre. Also, as they tend to be worse in low wet areas, it would be good to improve drainage in these areas. A single non-replicated study at Michigan State University found Castor Oil to be an effective control method, but it has not been repeated and is not currently labeled for use.

Sincerely,

Aaron D. Gabriel
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Crops and Soils