UMASS EXTENSION

Vegetable Notes

For Vegetable Farmers in Massachusetts

Volume 24, Number 6 May 23, 2013

In this issue:

Crop conditions

Frost touched crops in some parts of the state during the early morning hours of May 15, causing injury to some newly emerged potatoes, young sweet corn, asparagus and other susceptible crops. Northern New England dealt with damaging lows of 25-30° F with covers and irrigation wherever possible. Since then, both day and night temperatures rose and farmers around MA have stepped up their planting of frost-sensitive crops with some confidence. Row covers are coming off of some early Brassicas, corn, lettuce and squash, while being placed or kept on salad mixes (for flea beetle control), pepper, eggplant, summer squash, and tomato. Some fruiting crops are being planted without protection – ready to face the elements! Plastic is coming off the early corn. Greenhouse tomatoes and cucumbers are at various stages, some with full sized red fruit or fresh cucumbers ready to sell to a hungry retail market. Dry soils persisted until the past two days when steady rains covered the region. Asparagus has been set back by dry conditions, though more growers are using drip irrigation and seeing the benefit. Growers were laying plastic and transplanting, seeding corn, winter squash, beans; cultivating or spraying herbicide; preparing fields. As crops get well established and will soon be too big to cultivate or side-dress, use the presidedress nitrate test to determine if additional Nitrogen is needed.

Pest alerts

Contact info for disease diagnostics: Bess Dicklow, 413-545-3208, **www.umass.edu/agland/diagnostics.** 101 University Drive, Suite A7, Amherst, MA 01002. We are looking for volunteer tomato or potato (see May 9 issue); samples sent for late blight ID are n/c.

Use hot water seed treatment to prevent diseases in fall crops such as black rot and Alternaria of Brassicas. It's not too late, if you have not yet seeded these transplants. For details on how to do this on the farm see **http://vegetablemdonline.ppath.cornell.edu/NewsArticles/HotWaterSeedTreatment.html**

Biological control of Mexican bean beetle: be prepared for shipments of the MBB parasite, *Pediobius faveolatus*, which should be ordered as soon as you see eggs. See **http://nj.gov/agriculture/divisions/pi/prog/beneficialinsect.html** for more information.

Brassicas after hot water seed treatment, rotation to a new field with row cover.

Onion and Cabbage maggot flies are nearing the end of the first flight, but their legacy of root maggots are feeding on roots of unprotected Brassicas or Aliums. See GDD article.

Garlic should be growing well; if it seems stunted or develops yellow leaves, check the roots and stem. Onion maggot may be feeding, or stem and bulb nematode may be present.

Seedcorn maggot attacked seeds and seedlings that were planted in April; the first flight should be about over.

ECB traps: get them up soon to catch the beginning of the European corn borer flight. This is especially important for timing releases of Trichogramma wasps.

Flea beetle has been damaging arugula, tatsoi, mizuna, bak choi, mustard and lacinato kale this spring. See article below for management strategies.

Watch for striped cucumber beetle, which will move into cucurbit crops from field edges. Scout crops that are not covered with row cover. Damage before the 5-leaf stage reduces yield and allows entry of the pathogens that cause bacterial wilt.

Frost damage and Colorado potato beetle

Potatoes are up and Colorado potato beetles are moving in. Non-rotated fields, those near last year's crop (especially the edge nearest those fields) will see early and heavy populations. Scout fields 2X/week. Controlling adults is advised if populations are high; otherwise wait till larvae begin to hatch and the oldest reach 3rd instar, before damage is significant. See New England Vegetable Guide for details.

Imported cabbageworm butterflies are active in brassica fields. Early season populations usually are low. For more information: **http://extension.umass.edu/vegetable/insects/imported-cabbageworm.**

Root Maggot Update: In most areas of MA the GDD base 4°C are approaching 449, the point at which cabbage maggot models say that the flight of overwintering flies ends (see Table 1) . Pittsfield (ie, the Berkshire region) is cooler. Onion maggot flight – both the peak and the end – is a bit later. Seedcorn maggot has already ended. Unprotected Brassicas and onions we visited this week had fully grown maggots. New plantings are likely to be safe at this point.

Table 1. Cabbage Maggot Stages and Coresponding Growing Degree Days

Cabbage Maggot Stage	Accumulated Degree Days at base 4°C
1st Emergence	161
25 percent	204
50 percent	251
75 percent	304
95 percent	387
Overwintering generation	449.2

Cull piles can harbor diseases on your farm. What do you do with winter storage crops that are withered and sprouting, or the unmarketable, diseased or damaged leaves, stalks or culls from the packing shed? If a cull pile 'out back' is your disposal system, you may be encouraging the same diseases to carry over and build up from year to year. Potatoes and onions will re-sprout, and fungal or bacterial diseases can develop in the new tissue or the old, releasing spores or bacteria into the air or water. Dead, but not fully decayed stalks of tomato or Brussels sprouts still carry their diseases. A better solution is composting. Start by covering cull vegetables with a carbon source (leaves, bedding, grass clippings) in windrows so that it will heat up and kill the plants. Mixing and turning regularly are key to complete the composting process. Sources of bulky high-carbon materials include landscapers, town DPW, dairies, horse farms and other livestock operations.

BE PREPARED FOR EUROPEAN CORN BORER

Based on the accumulated growing degree days, European Corn Borer (ECB) emergence should be occurring soon. ECB overwinters as a late instar larva in the stalk of corn and other host plants. Its development into a pupa and then emergence as an adult moth is temperature-driven (see Table 2).

Table 2. European Corn Borer Development by Growing Degree Days

ECB first generation development	GDD (base 50F)
emergence	375
first eggs	450
egg hatch	550

Even if your corn is small, any farmers who are using traps to monitor flight should put them up as soon as

possible to be able to tell if flight has begun in your area. Managing ECB in early corn, whether grown on bare ground or pushed ahead by plastic or row cover, can be tricky. Usually we wait until pre-tassel and scout for feeding damage and small caterpillars in the emerging tassel. When corn is in whorl stage as flight begins, eggs are laid earlier in the corn's development and there can be feeding at the whorl stage. Large ECB larvae may still be around when ears form and their damage can slip by because it does not show up in the tassel. ECB feeding in the whorl can be detected as pinhole leaf damage in the inner part of the whorl. There is no need for alarm; no one needs to rush out and start spraying corn. However it's worth paying attention and scouting closely for both flight and feeding damage on that valuable earliest corn. It has been found that a late-whorl spray on corn that is infested in the whorl stage on can prevent ear damage in these early plantings when ECB flight starts early.

We are likely still several weeks (depending on our GDD accumulation in the next week) from active feeding, even in the warmer parts of the state. Paying attention to the GDD accumulation is important for the many growers who are using *Trichogramma ostriniae*, the tiny wasp that lays its eggs in ECB eggs, to control ECB. Timing is key for effectiveness: once eggs are hatched it's too late! The ideal time to release *T. ostrinae* is when eggs are in the field, but before eggs hatch. Growing degree day information (including 5-7 day forecasts) for many locations in MA can be obtained through the NEWA website (http://newa.cornell.edu/) and is published in this newsletter throughout the growing season (Table 3). Note that the base temperature-for ECB is 50° Fahrenheit (10°C).

- S. Scheufele, A.Brown, R. Hazzard

Table 3. 2013 Seasonal Growing Degree Days (from Jan. 1)

DATE: 5/23/2013	GDD	
Location	Base 4°C (39.2°F)	Base 50°F (10°C)
Belchertown	408.7	262.8
S. Deerfield	401.6	261.5
Stow	409.6	239.4
Bolton	415.8	262.2
Dracut	400.5	226.4
Tygnsboro	396.0	234.7
East Bridgewater	410.4	233.9
Boston	421.5	240.0
Pittsfield	309.7	177.5

Seasonal GDD differ with local microclimates.

Access data from weather stations in MA, NY, VT: **http://newa.cornell.edu/index.php?page=degree-days**

PRE-SIDRESS NITRATE TEST: SAMPLE SOILS NOW

Many crops have reached or will soon reach the stage when it's time to decide if and how much nitrogen to apply as a side dress or top dress. The pre-sidedress nitrate test (PSNT) (also known as the June Nitrate Test) can help you to determine the current level of nitrogen in the soil. If you have a soil probe, the sampling takes about 20 minutes per field (probes are available from many agricultural suppliers for $40 to $75.) The amount of nitrate-N (reported as parts per million N03-N) in the soil is a good indicator of whether more N will be needed to complete crop growth.

The PSNT is a tool growers can use to optimize N application, especially in soils with moderate to high levels of soil organic matter, where compost or manure have been applied, and when leguminous cover crops are grown in rotation. Research conducted for several years at UMass, along with several years of on-farm experience, showed that an appropriate threshold for peppers and winter squash is about 30 ppm nitrate-N. Above this level, sidedressing or topdressing supplemental N would be of no value and will likely decrease yield of butternut squash and peppers. Research in Connecticut has shown similar results in pumpkins. There is increasing agreement that a threshold of 30 ppm is appropriate for most vegetables except for sweet corn, for which the threshold is 25 ppm. Using the PSNT can save money and time, improve crop yield, and reduce the likelihood of N leaching and water contamination. As a tool, the PSNT should be used along with a grower's experience and knowledge of a field's management history and yield potential. Interpretation of PSNT results should be made with regard to weather conditions, such as leaching rains or soil temperatures, management history, and the growers knowledge about the sites management history and yield potential.

To collect a sample for nitrate testing, take 15 to 20 subsamples or cores from the field. Sample slices or cores should be taken to a depth of twelve inches. Avoid sampling fertilizer bands or other areas which have high concentrations of N fertilizer. Generally the best place to sample is between the rows. If plastic mulch is used, samples should be taken from under the plastic. With a soil probe you can just sample through the plastic, leaving small holes that cause no problem. Be sure to avoid any trickle irrigation tape under the plastic. Place all subsamples in a clean plastic bucket. Once all subsamples have been collected, thoroughly mix them in the bucket and scoop out about one cupful to submit to the lab.

Microbial activity can rapidly change the concentration of nitrate in warm, moist soil, so it is important to either rapidly air dry samples or to keep them cool. Drying can be accomplished by spreading samples in a thin layer on a sheet of non-absorbent paper. Samples can be stored moist if they are kept in a cooler or refrigerator, but they should be delivered to the lab within 24 to 48 hours. The lab will do the PSNT within one working day of receipt and inform you of the results. PSNT sample submission forms can be downloaded from the UMass Soil Testing Lab website, **www.umass.edu/soiltest.** The charge for this test is $8.00 (include a check made out to the University of Massachusetts).

- John Spargo, John Howell, Frank Mangan, and Ruth Hazzard

OUTLOOK AND MANAGEMENT OF LATE BLIGHT AND OTHER PATHOGENS OF TOMATO AND POTATO

Tomatoes: For tomato growers, the slate is clean in terms of survival of Phytophthora infestans inoculum from last year. The late blight organism is an obligate parasite, meaning it must survive on living tissue. The 2012 Late Blight (LB) isolate (US23) is not capable of surviving in the soil and is not seedborne in tomato. The situation is more complicated in high tunnels and greenhouses where warmer temperatures and longer continuous crop cycles not interrupted by sustained freezing temperatures, may allow the pathogen to survive in living tissue or reemerge in infected volunteers. Unfortunately, LB does not occur alone; there are other important foliar and fruit diseases of tomato that must be considered in making management decisions. A short list includes Septoria leaf spot (Septoria lycopersici SLS), Early Blight (Alternaria solani and A. tomatophila EB), and Bacterial leaf spot (Xanthomonas vesicatoria). Growers do not need to rotate away from the planting area they used last year specifically for LB control. However, most growers also have disease problems with one or more of the diseases listed above for which rotation is critical. Selection of resistant cultivars is the single most effective strategy to eliminate or lessen infections from foliar and fruit pathogens. Development of resistant lines and hybrids by conventional breeding has been underway in a number of breeding programs over the past decade. New hybrids have and are being released. Current resistant or tolerant cultivars include 'Iron Lady' (LB, EB tolerant, and SLS), 'Mountain Merit' (LB, EB tolerant), 'Defiant PHR' (LB, EB tolerant), 'Mountain Magic' (LB, EB tolerant), and 'Plum Regal' (LB, EB). A minimum of a 2-3 year rotation away from solanaceous crops and weeds is critical to reducing overwintering of Early Blight and Septoria Leaf Spot. Disease free seed is critical in eliminating bacterial diseases that are often seedborne, including Bacterial Leaf Spot, Bacterial Canker, and Bacterial Speck. Monitor and scout transplants for all fungal and bacterial diseases and start with clean transplants only. Remember that infected transplants were responsible for the pandemic of Late Blight in 2009. In greenhouses and high tunnels, providing good air circulation and low humidity by the use of fans and side openings reduces the development of the most important foliar diseases mentioned above as well as Botrytis blight and Fulvia fulva leaf mold. Fungicide sprays should be applied preventively and according to the recommendations of disease forecasting systems TOM-CAST (EB available at **http://newa.cornell.edu**) and BLITE-CAST (LB available at **http://usablight.org/**). Fungicide recommendations can be found in the current hard copy New England Vegetable Management Guide and on-line at **http://nevegetable.org/**.

Potatoes: Sources of Late blight inoculum can be LB-infected potato tubers that were saved from last year for seed, tubers not completely frozen that survive in compost piles and/or cull piles and sprout in the spring, or volunteer plants in fields. In the case of potato tubers as a potential source, make sure none survive in compost piles or as volunteers, and if present, dispose of them properly before you begin preparing the soil this spring. Use new, certified disease free seed tubers to establish your new crop in 2013. Consider seed piece treatments as a start to whole season disease control. Seed treatments protect against not only seed-borne Late Blight, but also against other tuber blemish diseases such as Silver scurf (Helminthosporium solani) and Black Scurf and canker (Rhizoctonia solani). Seed piece treatments can be found in the current hard copy New England Vegetable Management Guide and on-line at **http://nevegetable.org/**. Cultivars with resistance or tolerance are not a viable option for potato growers. However, for organic growers, choosing early maturing varieties that allow early harvest and avoidance of LB should be considered. See www.vegetablemdonline.ppath.cornell.edu/factsheets/Potato for a description of potato cultivars and their characteristics. Early blight is present every year and should be controlled by regular fungicide spray based upon weather and disease forecasting systems. The most effective Late Blight control is achieved by scouting and preventive fungicide sprays based upon BLITE-CAST (**http://usablight.org/**) recommendations. Fungicide recommendations can be found in the current hard copy New England Vegetable Management Guide and on-line at **http://nevegetable.org/**.

-Bess Dicklow, UMass Extension Plant Pathologist

LEAFMINER ON SPINACH, CHARD AND BEET

Spinach and beet leafminers, typically early-season pests, are active across the state now and are causing damage to early greens. They attack crops and weeds in the plant family *Chenopodiaceae* which includes chard, beets, and spinach as well as the weed host, lamb's quarters. The two species of flies are very similar, however, spinach leafminer may also cause damage in Solanaceous crops such as peppers while beet leafminer may prefer to lay eggs on beets.

The damaging stage of leafminers is the fly larva that burrows and feeds between the upper and lower epidermis of the leaf. Early damage is a slender, winding 'mine' or tunnel, but later these expand and become blotches on the leaves. The fly overwinters as a pupa in the soil and hatches in late April and May. The adult fly -- a small, gray fly 5-7 mm long -- lays eggs on the leaves. The oblong white eggs, less than 1 mm long, are laid in neat clusters on the underside of the leaves. They are easy to spot if you scout by looking under the leaves. If you find tunnels, pulling the epidermis off will reveal one or several pale, white maggots. When full grown, maggots usually drop into the soil to pupate. The entire life cycle is 30-40 days and there are three to four generations per season. Typically mid-late May, late June and mid August are peak activity periods. After August, pupae enter overwintering phase and won't emerge till next spring.

Leafminer eggs

Leafminer larvae

Leafminer injury

Adult leafminer fly

If the plants are infested early and populations are high, the losses from this pest may be great. This may be especially true when eggs on transplants in the greenhouse go unnoticed until planting in the field, resulting in infestations in row-covered crops. Treat when eggs or first tiny tunnels are noticed – see current recommendations below. There are both conventional and organic products available. An adjuvant is recommended to improve efficacy. Some soil-applied systemics are registered, but be sure to observe the long days to harvest restrictions. Most of the products labeled are for foliar applications.

Because leaf miner feeds mostly on one crop family and also on many weeds including chickweed, lamb's quarters and nightshades, weed control and crop rotation are the first line of defense. Row covers can also be used to exclude flies if placed over the crop before flies are active or immediately after planting.

Products labeled for spinach, chard and/or beets (often only 1 or 2 of these) include: (Abamectin (Agri-Mek* 0.15 EC), azadirachtin (Neemix 4.5)OG , bifenthrin (Brigade* 2EC), chlorantraniliprole (Coragen), dinotefuran (Venom 20SG), cyromazine (Trigard), emamectin benzoate (Proclaim*), permethrin (Pounce* 25WP), pyrethrins + piperonyl butoxide (Pyrenone),malathion (Malathion 57 EC), spinetoram (Radiant SC), spinosad (Entrust OG). See New England Vegetable Management Guide for more details (www.nevegetable.org). Of these, Coragen (a diamide), and Venom (a neonicotinoid) may be applied to transplants or soil, have systemic activity and a 7 dh interval.

-Adapted & updated 2013 by R Hazzard, from Eric Sidemann, Maine Organic Farmers and Gardeners Association

FLEA BEETLES IN BRASSICAS

Flea beetles are busy in spring plantings of brassica crops. Beetles overwinter as adults in field edges, and locate seedlings with uncanny speed and accuracy. They prefer *Brassica rapa* & *B. juncea* crops such as arugula, tatsoi, mizuna, bak choi, and mustard, but will also feed on the more waxy *Brassica oleracea* crops such as broccoli, cabbage, kale and collard. This pest has been steadily growing more numerous and difficult to manage in New England over the past two decades, possibly as a result of more production of more types of Brassica crops, and continuous succession planting from early spring through fall which encourages reproduction with multiple generations each year. The crucifer flea beetle (*Phyllotreta cruciferae*) is uniformly black and shiny, about 2 mm in length, while the striped flea beetle (*Phyllotreta striolata*) has two yellow stripes on its back. They have been colonizing crops from outside the field for the past 2-3 weeks, and will continue to move and feed through mid June.

Management

Crop Rotation. If you are growing succession plantings of Brassicas all season, you are likely fostering a second genera-

tion of adults that will emerge from their immature stages spent underground on your early crop, and look for new food to eat sometime in late July and August. That is when your fall crop will be young and especially susceptible. Plan now for where you can put those fall crops, to locate them as far as possible from spring brassicas. These are also the adult beetles that overwinter. Next spring, plan to use a field that did not have any late-season Brassica crops. After harvest, till crop residue immediately to uproot and kill underground larval populations. Note that rotating with other crop families that may also sustain flea beetle injury is OK – those are different flea beetles that feed on Solanacea, corn, or other crop families.

Row covers. This is the best method for attractive salad greens. Floating row cover provides the most effective protection from flea beetles, especially in spring and early summer. It is expensive in materials and time, but it works. It is critical to seal the edges immediately after seeding, because Brassica seeds germinate quickly and beetles rapidly find the cotyledons. Flea beetles can fit through extremely tiny cracks – not to mention the fist-sized holes and tears that often develop in row cover over time. Edges of the cover must be sealed on all sides using soil, black plastic bags filled with soil, or some other method. Fortunately hoops are not needed on brassica crops. Nonetheless, management is time-consuming because the cover has to be removed for cultivation. Replace it as soon as possible to avoid letting beetles in.

There are new products on the market for use as insect barriers. These are marketed as non-heating covers with high light transmission (>95%) and with the strength for multiple uses. Such insect barrier can be obtained from Dubois Agrinovations (ProtekNet Insect/Pest Control Netting) or from Texiinov Agrotextiles (Biothirps, Filbio). One can purchase a size of the fiber openings to suit your pest conditions, ranging from extra-fine enough to exclude thrips, medium fine for flea beetle, or less fine for maggot flies and cucumber beetles. For early spring crops, the additional warming benefit of traditional row covers of various weights may be preferred.

Chemical control. Several synthetic pyrethroids, carbamates and neonicotinoids (Group 4A, either as foliar or soil drench) are labeled for flea beetle in Brassicas. Avoid repeated use of one type of chemistry over multiple generations or using both soil and foliar applications of the same group. Growers who have used these extensively have reported reduced efficacy over time. Note that Thionex label has been cancelled and is no longer allowed on cole crops. Soil-applied systemic insecticides, such as Admire Pro and Actara can provide longer term control against damage, although beetles may be present when scouting. Watch longer days to harvest interevals. With foliar sprays, even if good control was achieved, re-infestations can occur rapidly and require additional sprays.

For organic farmers, the choice of chemistries includes spinosad (Entrust), which now has a federal label for use on flea beetle. Among organic products that were tested in UMass trials, this showed the greatest efficacy in suppressing flea beetles and reducing damage. Pyrethrin (Pyganic EC 5) showed poor to moderate efficacy in our trials but is reported by growers to cause a significant short-term knockdown. Abby Seaman, NYS IPM, found in 2012 trials that both kaolin (Surround WP) and hot pepper wax worked well. They did not prevent enough feeding for salad greens to be marketable, but they did prevent enough feeding for broccoli, cauliflower, cabbage, etc. to outgrow the damage. In 2012, we observed in grower fields in MA that kaolin reduced feeding damage in high-pressure situations. Use only on early crop stages, before marketable leaves or heads develop. Using this product early may be one way to keep costs down.

Control Brassica weeds. Brassica weeds harbor flea beetle (both adults and larvae) and reduce the efficacy of our crop rotation schemes that aim to break the pest cycle by changing crop families. Yellow rocket and wild mustard are familiar weeds that are widespread in fields and roadsides. The list of weed hosts probably also includes garlic mustard (Alliaria petiolata), a serious invasive weed in the Brassica family. It is a biennial with white blooms in spring (May), thrives in roadsides and field edges as well as shady woodlands, and has rapidly spread throughout Massachusetts. A good fact sheet on garlic mustard can be found at: http://www.nps.gov/plants/alien/fact/alpe1.htm or through the Invasive Plant Atlas of New England (IPANE) website.

Trap cropping takes advantage of an insect's feeding preferences to use a preferred plant species or crop variety as a draw. Insect numbers build up in the more attractive plants, and are less likely to move into or stay in the less preferred plants. With crucifer flea beetles, a border or even a middle row planted to Brassica rapa & B. juncea crops such as Komatsuna, tatsoi, mizuna, bak choi, and mustard has been shown to reduce numbers and feeding damage on less preferred B. oleracea crops such as broccoli, cabbage, or traditional kale (eg Winterbor types). Note that Red Russian kale (B. napus) and the B. oleracea Lacinato kale seem to of intermediate attractiveness. To make it work, here's some tips:

- Make sure the trap crop is established before the main crop (the one you are trying to protect) or is at least as big (eg transplanted same day). Direct-seeded crops can be used around transplants if seeded 7-14 days earlier.
- Use a fast-growing, vigorous cultivar for the trap crop
- Use a border crop to arrest beetles moving in. Traps at end of rows help make a complete perimeter, which stops beetles coming from all directions. Interior trap crops also can act as a 'sink' within the field.
- Spray trap crops to kill the accumulated beetles, keep them from moving on, and keep the trap crop viable enough to do its work. Use a longer-residual product.
- Combine with a repellent on the main crop. Surround WP and garlic sprays can be used for this purpose.

Flea beetle damage on a komatsuma trap crop

Break the cycle: no Brassicas before July. This may not easily fit your markets, but it does work. With no food or place to lay eggs, the overwintering adults leave the area, instead of reproducing and emerging in time for midsummer dining. It may take 2-3 years to bring populations down. Control weeds at the same time.

- Ruth Hazzard, University of Massachusetts

WHEN DISASTER STRIKES

Planting is underway and the perennial crops are in bloom, and famers are hopeful this year that the rainfall will be timely, the sun plentiful, and the pests manageable. However, this is Massachusetts and in the last 5 years we have had droughts, excessive rain, tornados, ice storms and flooding. These events have caused significant crop losses and damage to farm land. USDA was able to assist growers recover from these losses.

Many policies provide protection for prevented or late planting due to adverse weather. Growers prevented from planting a crop by the final planting date may be eligible for an indemnity payment. The specific details and dates are listed in your policy. Insurance coverage begins on different dates depending on the type of crop insured, and coverage continues until the crop is destroyed, or until the final harvest date. Growers are encouraged to review their policy and become familiar with the terms of the policy and important dates such as: final planting date, acreage reporting date,final harvest date.

Growers are reminded of the importance of notifying their crop insurance agent or USDA when a weather event lowers yields or destroys crops on their farm in a timely manner. Farmers with crops covered by a crop insurance policy must notify their agent 72 hours of the event but no later than 15 days after the final harvest date. Crops covered by a Non-insured Disaster Assistance (NAP) policy through the Farm Service Agency, must notify the FSA within 15 days of a date they are aware of damage to a crop or within 15 days of the final harvest date. Failure to notify your crop insurance agent or the FSA in a timely manner may disqualify your loss claim for indemnity.

Farmers may also suffer damage to crop land, conservation structures, trees, water supplies, etc. because of a natural disaster. USDA has a variety of programs to assist growers repair damaged cropland and structures. It is important for growers to notify their USDA office of any damage they sustain to their property as a result weather event. Reporting your losses before you start your repairs allows USDA to establish the level of damage and provide the local FSA committee with information they can use to request funds. Funds may not be available immediately as USDA requires states to document the extent of damage when requesting disaster assistance.

UMass Extension works in partnership with the USDA Risk Management Agency (RMA) to educate Massachusetts producers about Federal Crop Insurance and Risk Management Programs.

- For more information, please visit **www.rma.usda.gov** *or contact UMass Risk Management Specialists Paul Russell at pmrrussell@umext.umass.edu or Tom Smiarowski at tsmiarowski@umext.umass.edu*

UPCOMING MEETINGS:

Organic Crop Production: Soil, Pest and Food Safety Issues for Farmers

Monday, June 3, 2013 4:00 - 7:00 PM

NOTE TIME CHANGE! This meeting will begin at 4 pm, not 5 pm.

AVOID RTE 2 west of I-95: Seek routes that avoid reaching Waltham via Rte 2; construction between the Concord circle and Rte I-95 causes serious traffic jams. From the west Route 117 is one alternate route to Waltham.

Sponsored by: UMass Extension Risk Management/Crop Insurance Educ. Program and the Waltham Fields Community Farm

Location: Waltham Fields Community Farm, 240 Beaver Street, Waltham, Massachusetts

Program:

Introduction and Farm Overview. Claire Kozower and Amanda Cather, Waltham Fields Community Farm; Tom Smiarowski and Paul Russell, UMass Extension Risk Management Specialists

Challenges of Organic Soil Fertility Management. John Spargo, UMass Extension Assistant Professor - Soil Fertility and Nutrient Management & Director, Soil and Plant Tissue Testing Laboratory

Diseases & Insect Concerns for Organic Producers. Ruth Hazzard, UMass Extension Vegetable Specialist

Food Safety Issues & Weed Management in Organic Operations. Rich Bonanno, UMass Extension Weed and Food Safety Specialist

Registration: There is no registration cost for attendees. Preregistration not required. The program is funded by the U.S. Department of Agriculture Risk Management/Crop Insurance Program. For further information contact UMass Risk Management Specialists Paul Russell at pmrussell@umext.umass.edu or Tom Smiarowski at tsmiarowski@umext.umass.edu or Claire Kozower of Waltham Fields Community Farm at claire@communityfarms.org. Dress accordingly, held rain or shine.

Vegetable Notes. Ruth Hazzard, Katie Campbell Nelson, Lisa McKeag, Susan Scheufele, co-editors. Vegetable Notes is published weekly from May to September and at intervals during the off-season, and includes contributions from the faculty and staff of the UMass Extension Vegetable Program, other universities and USDA agencies, growers, and private IPM consultants. Authors of articles are noted.