UMass Extension
Vegetable Notes
For Vegetable Farmers in Massachusetts since 1975

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In this issue:

Mexican bean beetles can build up and cause serious damage. Now is the time to scout and order parasitic wasps when eggs are observed hatching. Photos by S. Scheufele

Crop conditions

The weather seems to have stabilized a bit (knock on wood!) and crews are busy picking, planting, and weeding. Strawberries are petering out while blueberries are nearly ripe in some fields. Cucumbers, spring onions, broccoli, cauliflower and head lettuce are joining the ranks on farmstand and market shelves across the state. Many of you have been taking some time away from your veggie fields to do some haying while the sun shines--the wet spring has meant lots of growth but has delayed cutting, so some fields are becoming over-ripe and many farmers are just halfway through their first cut. While it is a busy time of year to think about business planning, it is important to make sure that you have systems in place to quantify produce yields as they come in, and that you set prices carefully, so that later on you can determine your farm revenue accurately and make sure you are meeting your financial needs and goals—see article this issue from Purdue University Extension.

Pest alerts

Beans:

Mexican bean beetle adults were reported in Worcester Co., MA and Hillsborough Co., NH this week, but no eggs have been observed yet. Adults and larvae feed primarily on leaves, but when numbers are high they will also damage pods. Feeding occurs on the underside of leaves, but causes death of leaf tissue in a lace-like pattern. Feeding damage over 10-20% can cause yield loss. Plants are most sensitive in the pod fill stage. If releasing the parasitic wasp, *Pediobius foveolatus* to control this pest, place your order when you see eggs starting to hatch. See the New England Vegetable Management Guide for spray recommendations.

Brassicas:

Diamondback moth caterpillars and their characteristic pupae in 'hairnets' are being found all over MA this week. We are also seeing **Imported cabbageworm** caterpillars now, which usually emerge first but the migratory diamondback moth caterpillars beat them to the punch this year. See article this issue about brassica caterpillars to help you with scouting and making treatment decisions.

Cucurbits:

Squash vine borer trap counts have risen dramatically in MA and NH locations that historically have had high pressure (Table 1). Eggs were also found in Hampshire Co., MA on a bush delicata variety. This means that if adults are present, scout now for eggs. When using pheromone traps, treat crowning crops like zucchini and summer squash when 5 moths per week are captured and treat vining crops when 12 moths per week are captured.

Squash bug adults are being found at high elevations in Franklin Co., MA, while adults and eggs were found in fields in RI, CT and Norfolk Co., MA. Nymphs are likely present in some southern New England fields now.

Cucurbit downy mildew: While the forecast threat of CDM remains low in MA,

this disease has been confirmed on cantaloupe and cucumber in PA and on cucumber in NJ this past week. Keep an eye on the Cucurbit Downy Mildew Alert System and see the article from Meg McGrath in last week's issue of Vegetable Notes to determine what preventative actions should be taken now.

Tomato:

Pythium was diagnosed causing problems in transplants early this cool spring at one farm in Middlesex Co., MA. Surprisingly, the problem persisted into the field, with healthy plants taking off and infected plants remaining stunted, only recently sending out healthy secondary roots higher up on the stem (photos).

Pith necrosis was confirmed on field tomatoes in Kent Co., RI. This disease generally occurs on early planted tomatoes growing when night temperatures are cool, the humidity is high, and the plants are growing vigorously because of excessive levels of nitrogen. The disease is also associated with prolonged periods of cloudy, cool weather. Initial symptoms often appear just as the first fruit clusters reach the mature green stage and consist of yellowing and wilting of young leaves.

Tomato pith necrosis causes black streaking and cracking of stems, excessive production of adventitious roots, and hollowed blackened stems. Leaves yellow at margins and branches die back. Photo by A. Radin

Potato:

Dickeya Black Leg was positively diagnosed on Lehigh potato in Franklin Co., MA. If this disease is diagnosed on your farm, inform the seed source so that proper steps may be taken to reduce the spread of this seed-borne pathogen.

Sweetcorn (Table 2):

European corn borer**:** trap counts remain low in MA and NH, however, it is time to scout tasseling and silking corn since combined counts of caterpillars are used to determine whether or not a spray is warranted. A threshold of 15% of plants with one or more caterpillar per plant should be used. Good news! Growers have reported no significant damage from the first flight of ECB this season in MA.

Corn earworm captures are starting to go up at some of our coastal trapping locations and a spray interval of 4-6 days is now in effect for silking corn at locations listed in Table 2.

Non-target moths in pheromone traps: Wheat Head Moth is

Table 1. Accumulated Growing Degree Days: 1/1/17 - 7/6/17

Location	GDD (50°F)
Western, MA	
Amherst	987
Westfield	1050
South Deerfield	949
Central, MA	
Leominster	1014
Stow	1077
Eastern, MA	
Sharon	1060
Seekonk	1058
Ipswich	947
Hollis, NH	997
Burlington, VT	1016
Newport, RI	886
Castleton, NY	1096

Table 2. Sweet Corn Trap Counts Week 6/29/17-7/6/17

Location	ECB Weekly Total	CEW Weekly Total	CEW Spray Interval
Western, MA			
Amherst	-	-	-
Sheffield	1	-	-
Whately	1	2	6 days
Central, MA			
Leominster	2	0	no spray
Eastern, MA			
Millis	1	-	-
Sharon	0	-	-
Swansea	0	27	4 days
Dover	0	-	-
Seekonk	0	9	4 days
NH			
Litchfield	0	3	6 days
Hollis	0	1	6 days
Mason	-	-	-
NY	0	1	no spray
Albany, NY	0	1	no spray

not a pest of sweet corn, but is being captured in very high numbers in Fall Armyworm traps in NH this week. It is a pest of wheat however, so follow the link below to learn more about this pest if you are growing wheat. **Gypsy moth** adults are also being captured now in European corn borer traps in MA. Learn to identify these non-target pests: Identifying Moths in Traps for Sweet Corn Pests

Multiple

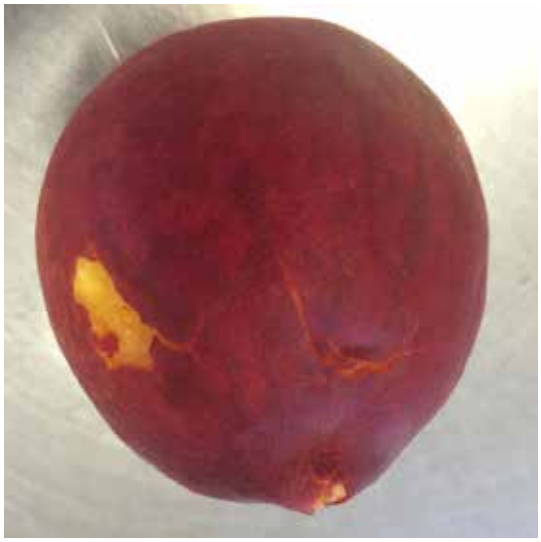
Potato leafhopper pressure has been high this year and was reported finally reaching northern NH last week. In a field scouted in Middlesex Co., MA, a younger succession of eggplant and beans both with young tender leaves were at threshold for treatment while an older succession of eggplant were below the threshold of 1.5 leafhopper per leaf in eggplant. In green beans, thresholds are 0.5 per sweep or 2/ft of row at the seedling stage, and 1/sweep or 5/ft of row from 3rd trifoliate leaf to bud stage.

Scarab beetle (Japanese beetle, Asiatic garden beetle and Oriental beetle) adults have emerged in MA. For controls in a crop where these beetles are rarely a pest and therefore not mentioned in the Guide, check the label of commonly used broad spectrum synthetic pyrethroids, carbamates, and neonicotinoids (as foliar spray). Organic options include azadiractin-based products and pyrethrin.

STORM DAMAGED VEGETABLES – WIND AND HAIL

--by Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Originally published in University of Delaware Extension Weekly Crop Update, June 21, 2013



Hail caused damage across the state on greens , tree fruits, and other crops. Here is hail damage to a nearly ripe peach crop taken in 2015. Photo by S. Scheufele

Several areas throughout Delmarva have been hit with violent storms producing heavy winds and/or hail. Damage to vegetable crops by severe wind and hail includes leaf defoliation, leaf tearing and shredding, stem breakage, stem bruising and wounding, loss of flowers and small fruit, and fruit bruising and wounding.

Effects of storm damage on vegetable crops and recovery of crops will depend on a number of factors including the type of vegetable, stage of growth, weather conditions immediately after storms, and prevalence of disease organisms. Continued hot, wet conditions after storm events pose the most risk by increasing disease incidence, particularly bacterial diseases.

Defoliation reduces leaf area and plants will need to grow new leaves from buds (for vegetables such as vine crops where this is possible). It will take several weeks to replace the leaf area lost. This will cause delays in maturity. If crops are more advanced, loss of leaf area can reduce fruit or storage organ quality (reduced sugars). Fruit or storage organ size may or may not be affected. Leaf area recovery (growing new leaves) will be aided by additional nitrogen applications after the storm event.

In crops such as sweet corn that cannot grow new leaves, research has shown that hail damage will reduce marketable ears and overall tonnage if leaf damage occurs in vegetative stages or at silking. Leaf loss near harvest will have minimal effects.

Fruit bruising or wounding often causes the most severe losses in crops such as tomatoes. Fruits may be rendered unmarketable or of reduced grade. Wounds can also increase the incidence of some fruit diseases and storage rots. In particular, bacterial rots that normally are minimal may be increased in damaged fruits. In plants such as tomatoes, it is advised to remove damaged fruits from plants. These fruits are likely to be unmarketable and will just be a drain on food resources produced by the plant. By removing damaged fruits, remaining uninjured fruits will have access to more photosynthates being produced by the plant.

Stem breakage or injury can lead to major losses in some fruiting crops such as peppers by loss of fruiting area as well as increased sunburn as plants are opened up. Many vining crops will recover significantly from stem breakage by producing

new branches, although production will be delayed.

Losses of flowers or small fruit may limit yield potential and delay crop harvest in many vegetable crops. Beans that are flowering are particularly susceptible and flower loss due to storms may lead to split sets.

Damaged plant tissue also can affect healthy surrounding tissue. As cell contents leak, enzymes, oxidative compounds, and other reactive chemicals are released that can injure surrounding cells.

Age and stage of development of plants will also be a factor in the overall impact of storm damage. A good example is with bean plants. In the case of hail, the bean plant is considered dead if it is in the cotyledon stage and is cut off below the cotyledons, or if the cotyledon is damaged by hail to such a degree that they have no green leaf tissue or re-growth. The reason is that nutrients and food reserves in the cotyledons supply the needs of the young plant during emergence and for about seven to 10 days after emergence, or until there is one fully-developed trifoliolate leaf. Cotyledons are the first photosynthetic organs of the bean seedling and are also major contributors for seedling growth. Unlike corn, whose growing point is below ground until it reaches V5-V6, the growing point for beans is between the cotyledons and moves above the soil surface at emergence. This makes beans particularly susceptible to damage from hail, or anything that cuts the plant off below the cotyledons early in its life. Stand reductions are likely to follow hailstorms. If the first trifoliate leaf is formed, photosynthesis by the developing leaves is adequate for the plant to sustain itself.

Of immediate concern after storms will be bacterial diseases on susceptible crops. Bacterial diseases have been shown to be more severe after storm damage as they can readily enter through wounds. Including copper products in spray programs after storm injury is recommended to limit bacterial diseases. In North Carolina research, peppers were shown to have increased bacterial spot after hail. Use of copper fungicides with maneb limited the effect of bacterial spot in these hail damaged peppers.

There has been some recommendation to use peroxide based fungicide/bacteriacide products after storm events. These products kill what they contact and have no residual. There may be some reduction in the numbers of disease organisms on plant surfaces; however, there is little research to show major benefits after storm damage.

General recommendations for storm damaged vegetables are to first evaluate the extent of the damage. According to the stage of the crop and extent of damage, determine if the crop can be salvaged. Crop insurance adjusters are trained to evaluate storm damage in many crops and should be contacted immediately for insured vegetable crops. For crops that will be salvaged or kept, consider applying additional nitrogen to encourage new growth where appropriate. Apply fungicides and include copper compounds where bacterial diseases are of concern.

From left to right, eggs of DBM, ICW, and looper.

CATERPILLARS IN BRASSICA CROPS

We are starting to see the first caterpillars and feeding damage in brassicas across the state. Though they may all look alike, the four major brassica caterpillar pests are different species and there are important distinctions among them that can affect your management decisions. They differ in size and feeding habits, as well as how susceptible they are to beneficial parasitoid insect species, and certain insecticides. Getting acquainted with the pests helps you to know what kind of damage to expect and what to look for when scouting for their different life stages and biocontrols. Feeding damage by any of these caterpillars can reduce yield and marketability of both leafy and heading crops.

Imported cabbageworms are light green, fuzzy, and slow moving. As they grow they move towards the growing point. Photo by S. Scheufele

Imported cabbageworm, cabbage butterfly (*Pieris rapae*) is a very familiar white butterfly which can be seen in the daytime fluttering around brassica fields. Each forewing has a dark border and one or two round black spots. Eggs are laid singly on the underside of leaves, standing upright (see photo). They are slightly elongated, kind of bullet-shaped, about 1/8 inch in length, and initially pale white, but turning to yellow as they mature. The larva is gray-

green, slightly fuzzy, and sluggish but can be very well camouflaged. Feeding and resting occur on the underside of leaves, and larvae feed more heavily in the head of cabbage or broccoli as they develop. The overwintering stage is the crysalis (pupa), which is green or brown, smooth with three pointed ridges on its back. There are 3-4 generations per year.

Diamondback moths are paler green and have forked "tails." If you disturb them they wriggle on a length of silk.

Diamondback moth *(Plutella xylostella)* adults are tiny (<1/2 inch), light brown, and rest with their wings folded together like a tent. DBM adults may overwinter in some years in the warmest parts of MA, but mainly this pest is blown in from warmer areas. Adults are weak fliers, but populations are known to disperse long distances on wind and annually reinvade areas well into Canada. Eggs are laid singly or in small clusters (see photo). Caterpillars go through four instars and are small (<1/2 inch when fully grown), light green, and appear segmented, with a forked end and pointed shape. When disturbed they wiggle vigorously and may drop off the plant on a string of silk. Feeding causes small, round holes and tends to be spread across the foliage and not necessarily concentrated in the head.

Cabbage loopers are bright green, smooth, and move like inch worms. Photo by K. Campbell-Nelson.

Cabbage looper *(Trichoplusia ni)* usually does not survive the winter in New England and arrives in migratory flights from farther south. Generally populations of cabbage loopers are not high until late-July or August, though some years they are not found at all or earlier flights occur. Adult moths are mottled gray-brown, about 3/4 inch long, with a distinct round silver-white mark on each fore-wing. Since they fly at night, they are rarely seen unless monitored with pheromone traps. If you want to know when moths arrive, use a wing trap baited with *Trichoplusia ni* lure, placed near the canopy. Eggs are round, pale green or yellow, and are laid singly underneath the foliage (see photo). The cabbage looper caterpillar is light green, smooth, with wavy white or light yellow lines down the back and sides, and prolegs at the tip of the abdomen. Full-grown larvae reach 1 ½ to 2 inches. Cabbage loopers of any size will raise the middle of their body in a characteristic "loop" shape, as an inch worm would. Feeding tends to create ragged, large holes in foliage, on both frame leaves and heads. Cabbage looper also feeds in many non-brassicas including lettuce, celery, spinach, and chard so when they do arrive, scout those crops as well as brassicas.

Cross striped cabbageworms are not at all green, having white, black and yellow stripes. They occur in clusters, quickly decimating one plant but leaving its neighbor unharmed. Photo by S. Scheufele

Cross-striped cabbageworm (*Evergestis rimosalis*) Formally restricted to the South, this insect is now a serious problem on brassica crops in southeastern New England. One of the major differences between this insect and the other brassica caterpillars is that the eggs are laid in a group (see photo), and caterpillars feed in a group on one plant so that it's covered with big holes like buckshot.

Cross-striped cabbageworm (CSC) is closely related to European corn borer, and the adults are similar in shape and coloring–straw-colored with a little purple, and crossed by wavy lines. Since it flies at night, you will likely only notice the caterpillars and their damage. The clusters of 3 to 25 eggs are yellow, flattened, and attached to the lower leaf surfaces. The caterpillars are light bluish-grey on top and green underneath, with numerous black transverse bands across their backs and a yellow line down each side. Larvae grow to 3/4"-long in 2 to 3 weeks. There are 2-3 generations per year, but generally it's only in late summer that numbers reach damaging levels. Larvae can produce small holes in leaves until only veins remain, feed in terminal buds and sprouts, or burrow into heads. Plants with larvae are often completely skeletonized. Adjacent plants may be left undamaged.

Field Scouting and Management. It is especially important to check cabbage or broccoli plantings as they begin forming heads. Greens such as collards and kale should be scouted earlier, since all leaves are marketed. Check at least 25 randomly-selected plants throughout the field, looking for caterpillars or fresh feeding damage on the top or underside of leaves. Feeding damage can be found on the underside of leaves or in the center of the

plant where heads are forming. Look for black or green frass and tiny feeding holes, clustered together. Often it is easier to spot the frass and feeding damage first, then find the caterpillar. Classify plants as infested (one or more caterpillars present) or non-infested, and calculate the percent of plants infested. In the Northeast, there is generally no need to treat young plants unless weather conditions delay plant development and at least 35% of them are infested with any of these pests. Treat heading crops between the start of heading and harvest if 15-20% or more of the plants are infested. The most critical time to scout and apply controls is just prior to head formation. For leafy crops like kale and collards where all leaves are marketed a 10-15% threshold should be used. Because cross-striped cabbage worm can be so destructive, a lower threshold should be used – treat when 5% of plants are infested with this pest.

Insecticide applications. Use selective insecticides to protect beneficial insects that keep aphids under control, eat insect eggs and small caterpillars, and parasitize either ICW or DBM. Selective products often are most effective when consumed with foliage so coverage is important. Use at least 50 gal spray material/A; higher volumes provide better coverage. Better coverage of lower leaf surfaces can also be achieved by using drop nozzles. Use a spreader-sticker. Effective, selective insecticides include:

- *diamides* (Group 28) including chlorantraniliprole **(Coragen**, 3 dh, REI 4h, Bee toxicity: L)

- *spinosyns* (Group 5) including spinetoram (**Radiant**, 1 dh, REI 4h, Bee toxicity: M) and spinosad (**Entrust**^{OG},1 dh, REI 4h, Bee toxicity: M) - *also effective against flea beetles and onion thrips*

- *Bacillus thuringiensis* (Group 11) products including *Bt aizawi* (**XenTari**^{OG}, 0 dh, REI 4h, Bee toxicity: L) and *Bt kurstaki* (such as **Dipel DF**^{OG} and many other products, 0 dh, REI 4h, Bee toxicity: L) – *these materials will* ONLY *affect caterpillars*

These materials and the *aizawai* strain of *Bt* will usually provide better control of resistant DBM than older products. See the cabbage/insect control section of the New England Vegetable Management Guide for additional synthetic and naturally derived products and more details.

Cultural and Biological controls. Incorporate crop residues shortly after harvest to reduce movement to successive plantings and reduce overwintering populations. Populations are suppressed by a wide range of natural enemies. There are several species of wasps that are important parasitoids of brassica caterpillars. Diamondback moth eggs are parasitized by the ichneumonid wasp, *Diadegma insulare*, which occurs naturally in Eastern North America. *D. insulare* females require sources of nectar to be effective DBM parasitoids, so maintain wildflower stands near brassica fields. The braconid wasp, *Cotesia rubecula*, was introduced to New England from China in 1988, and is now established in Massachusetts. This wasp parasitizes imported cabbageworm eggs. You may see their small white cocoons on brassica leaves. The chalcid wasp, *Trichogramma brassicae*, will lay its eggs in many species of caterpillar, including all of the brassica pests above (as well as non-target caterpillars, so be cautious if you *are* maintaining wildflowers that might attract endangered moths or butterflies). These wasps are not found in New England, but can be purchased from several biological control companies for release in brassica fields. The wasps arrive as pre-parasitized caterpillar eggs that are glued to cards that can be distributed throughout the crop. Each card costs around $16-$20, and contains about 100,000 wasps, which is enough for up to 1 acre. According to one source of *T. brassicae* wasps, IPM Labs Inc., some growers will release one card per acre per week for about 4 weeks, while others will release every week for the life of the crop, and will release the wasps in lieu of using any kind of pesticide. These biological controls are compatible with many selective and lower impact sprays (Bt, oils, soaps) used for control of caterpillars, particularly since the wasps are protected from sprays for longer than they are vulnerable, as much of the time they are unreachable inside of their host eggs. Another source, Evergreen Growers Supply, notes *Trichogramma* wasps are more effective against moth species that lay their eggs in clusters, so may be a good option if cross-striped cabbage worm has been a particular problem.

--R. Hazzard, S.B. Scheufele and L. McKeag

IS MY FARM PROFITABLE? THE DRIVERS OF FARM PROFITABILITY

--by Allan Pinto and Ariana Torres. Originally published in the Purdue University Extension Vegetable Crops Hotline, issue 630, June 22, 2017

Ensuring farm profitability is probably one of the most important tasks of every farm owner. Being profitable means that the farm is generating enough money to pay employees and bills, repay loans, and provide the farmer with enough earnings to make a living.

In a 2012 survey of fruit and vegetable farmers, Torres and Marshall (2016) found that 86 percent of interviewed farmers in Indiana reported annual revenues less than $250,000. Of them, almost a third made less than $10,000 annually. Their survey also found that about a third of the farmers reported additional off-farm sources of income while still spending an average of 46 hours per week on farm activities.

Most of the specialty crop farmers are satisfied with their farming systems, but they tend to indicate that they are concerned about the financial health and sustainability of their farm businesses. Using decision-making tools can help farmers evaluate how efficient their farm resources are being used and how financially healthy their businesses are. In other words, to improve profit, it must first be measured.

Calculating farm profitability is a decision-making tool that helps farmers assure financial sustainability. Farmers may use this information to create financial statements and measure their financial positions. Farm profitability provides farmers with a "moving picture" of the farm's gain over time. Farmers can compare their performance to similar successful farms or relate current year's performance to prior years.

For example, farmers can evaluate if their net profits are increasing or decreasing over time. Farmers can also compare the net profits of field-grown tomatoes to those from hydroponic tomatoes.

There are a few ways to calculate profits, but one of the easiest and most common is presented in Equation 1. The net profits or financial gain is the result of the total money earned (revenues) minus the total money spent on production, harvesting, and selling activities throughout the growing season (costs).

Equation 1

Net Profits = Revenue – Costs

Revenue = price × quantity

Costs = variable costs + fixed costs

Costs can be further categorized as variable and fixed costs. **Variable costs** (or operating costs) are those that vary with the level of production; farmers do not incur variable costs if production stops. Examples of variable costs for a tomato farm are the payments for labor, seeds, fertilizers, mulch, cages, irrigation, fuel, and other inputs. Labor costs tend to be the highest input category of costs for specialty crops operations. According to the United States Department of Agriculture (USDA), "wages, salaries, and contract labor expenses represent roughly 17 percent of total variable farm costs and as much as 40 percent of costs in labor-intensive crops such as fruit, vegetables, and nursery products".

Fixed costs are those that farmers have to incur whether they are producing or not. Fixed costs are usually payments made to capital assets such as equipment, land, buildings, and machinery. For example, if a farmer buys a tractor, she will have to make her payments whether she harvested the tomatoes or not. Other examples of fixed costs are depreciation, insurance, taxes on property, and repairs and maintenance.

Machinery depreciation is calculated as the price paid for the machinery minus the salvage value (the estimated

resale value of an asset at the end of its useful life), divided by the years of useful life (see Equation 2). For example, a tractor that costs $50,000 with a salvage value of $10,000 at the end of 10 years will have an annual depreciation value of $4,000 [annual tractor depreciation = ($50,000 – $10,000)/10 years].

Equation 2

Annual machinery depreciation = (price of machinery – salvage value) / years of useful life

Farm revenue is the quantity of produce sold multiplied by the prices received. Farmers should keep track of their produce yields throughout the season to accurately quantify farm revenue. The revenue of a farm selling 400 pounds of heirloom tomatoes from May through October at a price of $2.50 per pound will be $1,000.

Net profits are equal to the total revenues received throughout the growing season minus variable and fixed costs incurred over the same period. In addition, farmers can calculate their **gross profit** by the variable costs from the total revenues (see Equation 3). Gross profit is useful for measuring the efficiency to cover all the costs related to production. Gross profits does not equal farm net profits as they do not include fixed or asset costs, but they provide valuable information on the efficiency of a specific crop or enterprise. Gross and net profits are useful indicators of farm financial health and its ability to generate enough cash to meet obligations.

Equation 3

Gross Profit = Revenue – Variable Costs

While farmers are more likely to have control over production yield and variable and fixed costs (internal factors), market prices (external factor) may be one of the least controlled variables in Equation 1. Prices depend on the market characteristics, market demand, competition, consumer perceptions, and produce characteristics. For example, prices are influenced by the type of market channel (direct sales or retailer markets), the number of customers demanding a product, the number of competitors offering the same produce, the value customers place on the produce, and the quality of the produce offered. For more information on how production costs and customer value affect prices, see The Top 5 Things to Consider before Pricing Your Products.

Asking customers is a great way to understand their perceptions and the value they place on the produce. Farmers may ask customers at the farmers' market stand, at the time of delivery, or by developing surveys on their Facebook business pages. Ideally, farmers will know their production costs before pricing their products. Farmers should also observe what other farmers and competitors are charging for similar produce. Price points from other vendors and other markets can help farmers benchmark their pricing strategy and evaluate how much money other markets are charging customers. While supermarket prices tend to offer cheaper produce because of their supply chain efficiency, their prices can provide a baseline for minimum prices. Observing produce price at direct markets (e.g., farmers markets) is a great way to compare how prices, and potential profitability, may affect farmers success.

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Events

2017 Twilight Barn Meeting

When: Wednesday, July 19, 2017 - 5:30pm to 9:00pm

Where: Walnut Hill Farm, 39 Koebke Rd. Dudley, MA

Please join us for a wonderful event and dinner. We will discuss some innovative practices adopted by farmers in recent years. This years Twilight Meeting will be hosted by the Koebke family in Dudley. Come and join us for a great educational event and dinner!

2017 Twilight Meeting Agenda

5:30 - Registration and Social - 6:00 - Welcome and Farm Tour

6:50 - MDAR Commissioner John Lebeaux

7:00 - Recent Innovative Practices on the Farm- Panel Discussion Moderated by: Carl Majewski (UNH Extension), Participants include 3-4 farmers, Kate Parsons (NRCS), and Dr. Masoud Hashemi (UMass).

7:50 - Massachusetts Farm Energy Program (MFEP). Gerry Polano (MDAR).

8:00 - Massachusetts Nutrient Regulations Updates. Hotze Wijnja (MDAR).

8:10 - Southern New England AgrAbility Project. Joyce Meader (UConn Extension)

8:15 - RMA Update. Tom Smiarowski and Paul Russell - 8:20 - NRCS Update, Bob Purcell - 8:25 - FSA Update, Kip Graham

8:30 - Dinner and Social - 9:00 - Adjourn

For more information and to RSVP, please contact Masoud Hashemi at (413) 545-1843 masoud@umass.edu or Kelly Kraemer at (413) 545-5221 kkraemer@umass.edu.

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