This weekend will bring peak plum curculio activity for the year. If you have not applied an insecticide effective against plum curculio since June 1, your existing protection may not last through the relatively high-pressure PC days on June 11-14. In that case, updating coverage is recommended before the weekend heat arrives.

Experimental Plum Curculio activity rating

Purple columns show Temperature x Air moisture (vapor pressure deficit) as a possible indicator of the relative level of plum curculio (PC) activity on each day compared to other days at the same location.

Vertical green line = today’s date. Green dotted line = end of forecast range. Vertical red line = McIntosh fruit set date. Vertical black line = estimated end of PC movement into orchards from nearby woods.

This experimental rating is an attempt to indicate which days have higher risk of PC damage as compared to other days at the same location based on temperature and drying capacity of the air. Ratings are relative and only reflect weather conditions, not local PC population density or the percentage of PC killed by previously by insecticide. Thus, damage risk on later dates is overstated. Despite these limitations, this rating can serve as an indicator of weather conditions likely to promote relatively high PC activity and thus damage if effective residual protection has not been established or has been depleted. CAUTION: PC damage can occur on a day with a low rating, especially where PC population is high!
**Orchard Calendar**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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</table>
| June 2, Fri| McIntosh Fruit Set  
Good time to recheck that sprayer calibration is still on target after early season sprays.  
First cover spray is timing for manganese foliar application where deficient.  
One of many boron application times, boron recommendations are too complex for this table.  
Increased risk of Plum curculio damage.  
Usually best time for scouting 1st generation Spotted tentiform leafminer mines as more of the first generation mines have had time to appear, but still early enough for effective control even with systemic insecticide options that require application within two weeks after petal fall for best absorption.  
Where Powdery mildew is a concern, check 100 terminals per block (10 per tree x 10 trees). Finding more than 20% infected terminals between fruit set and terminal bud set indicates weakness in control program and high risk for yield reduction and fruit infection next season. Date for terminal bud set varies by variety, tree age and nutritional status, but is generally around 6-8 weeks after Petal fall. |
| June 6, Tue| Date of final primary scab ascospore release ('final' defined as best guess that 99+% of ascospores have been released, with high probability that at least 95% have been released.) |
| June 7, Wed| Date by which 50% of primary scab potential has had time to begin appearing as 1st generation foliar lesions. Good time for intensive scab scouting. Finding 5 or more infected leaves per 100 fruit cluster clusters in a commercial orchard suggests need for increased fungicide protection to suppress spore production from lesions and to protect leaves and fruit from secondary infections. It also indicates need to identify cause for breakdown in protection. Common causes are inadequate fungicide coverage, timing, or dosage. |
| June 9, Fri| First date after Petal Fall with increased sensitivity for chemical thinner application. |
| June 11, Sun| Earliest safe date for final Plum curculio insecticide spray. See Plum curculio table and charts. |
| June 13, Tue| Date by which blossom blight symptoms would become obvious if fire blight blossom infection occurred on May 18. |
| June 14, Wed| If using pheromone traps to time sampling for Obliquebanded leafroller larvae, time to set traps. First trap capture expected in 7 days. |
| mid-June to mid-July| Most effective timing for controlling persistent weeds (bindweed, brambles, dandelion, goldenrod, vetch etc.) with Gramoxone (paraquat) or Rely (glufosinate).  
Green apple aphid populations typically become more apparent at this time. Effective biocontrol in most orchards limits threat to young trees for which maximum growth is desired. Treatment threshold on established trees is if more than 50% of shoots are infested AND less than 20% of aphid colonies have predators. |
| June 16, Fri| ERM threshold increases to 2.5 mites per leaf, or mites present on 59% of middle-aged fruit cluster leaves, until July 16. See ERM sampling table for optimum scouting intervals. |
Pest thresholds

Shown below is the scouting report form we use for the Extension – Pomological Society Scouting Cooperative. It includes interpretive threshold values for most of the major pests.

Apple Scouting Report

Grower: Date:
Scout(s): REI status:

Pest codes and thresholds

AM = number of apple maggot flies per individual trap. Traps are individually numbered as shown on orchard map sent previously. Threshold is an average of 1.5 new AM per trap per week. Avg. = average per trap across all traps in a block.

CM, LAW, OBLR, OFM = Number of codling moth, lesser appleworm, obliquebanded leafroller, or oriental fruit moth per trap. Traps are individually numbered as shown on orchard map sent previously. No clear thresholds. Pheromone traps are not very reliable for tracking population density. Rough guide is <6 per week = low, 6-15 per week = moderate population, probably kept in check unless there is no insecticide used for other pests, >15-20 week = targeted treatment may be needed.

ERM = number of European red mite-infested leaves out of 40. Threshold varies by date.
Petal Fall – June 15: <7 low, >23 high – miticide needed. For intermediate values, increase sample to 100 leaves, threshold is 30%.
June 15 – July 15: <16 low, >29 high – miticide needed. For intermediate values, increase sample to 100 leaves, threshold is 59%.
July 16 – August 15: <20 low, >36 high – miticide needed. For intermediate values, increase sample to 100 leaves, threshold is 77%.
August 16 – 31: <28 low, >39 high – miticide needed. For intermediate values, increase sample to 100 leaves, threshold is 86%.

FB = number of suspected fire blight infections visible from 10 “stop and look around” views.
No below threshold value, one is too many. Used for tracking spread or progress in eliminating fire blight strikes.

LM = number of leafminer sap-feeding mines on 40 mid-shoot leaves. Threshold varies with tree stress and date.
1st generation threshold from Petal Fall to PF+15 days = 0.1 – 0.3 per leaf. 2nd generation threshold in late July 1 per leaf.

LR = number of leafroller-infested shoots found on 100 shoots. Threshold is 4 or more.

PC = number of recent plum curculio cuts found on 100 fruit.
No threshold, finding fresh cuts indicates possible need for renewed insecticide coverage.

SCAB = number of leaves with active scab lesions on 100 fruit cluster and vegetative shoots.
Informal threshold: <5 = scab level is low, fungicide intervals to suppress flyspeck adequate to prevent noticeable fruit infections; 6–15 = intermediate, >15 scab level is high, suggests that two fungicide applications a week apart, and a protective follow-up application two weeks later are needed to prevent new infections until spore population declines. F = fresh-looking active scab lesions. O = Older, presumably less active lesions. We try not to count leaves with only dead lesions, but there is no clear distinction between active, dying, and dead ("burned out") lesions.

WAL = approximate number of white apple leafhopper nymphs on 40 leaves. Threshold is 1 per leaf.

X = missing or unusable trap

Observations were made for ONLY the pests listed below. Absence of observations for a pest simply means no information was collected, and does NOT mean the pest was below threshold.

<table>
<thead>
<tr>
<th>Block(s) and Pest code</th>
<th>Number of pests or affected leaves/number leaves, fruit, or shoots-clusters checked</th>
<th>Comments</th>
</tr>
</thead>
</table>

Scout observations serve only to supplement, not replace, a grower’s own observations. Scouting report is not a recommendation for or against treatment. For interpretation of scouting report or to discuss management options, call Glen Koehler at 581-3882 (office), 485-0918 (cell), or email glen.koehler@maine.edu.
"The grass may be greener on the other side but at least you don’t have to mow it.”
~ Anonymous