# Vegetable problems, 2011 Michigan

In chronological sequence from spring to fall

As reported in Michigan State University Extension Vegetable CAT Alerts

(Crop Advisory Team) With links to the articles

But first:

### What was GOOD last year?

What worked, what produced well? Why?

Now, on to diagnosing and planning to avoid 2011 problems in 2012!

# **April**

1) Potato blight information -

http://news.msue.msu.edu/news/article/urgent\_potato\_late\_blight\_information\_update

Know your onion diseases and how to manage

2) Aster leaf hoppers in carrots http://ipmnews.msu.edu/vegetable/vegetable/tabid/151/articleType/ArticleV iew/articleId/3319/Aster-leafhoppers-in-carrots.aspx

3) Degree days, how behind are we http://news.msue.msu.edu/news/category/vegetables/P230

### May

4) Asiatic garden beetle a new pest -

http://news.msue.msu.edu/news/article/asiatic\_garden\_beetle\_a\_new\_pest in southwest\_michigan6) Purple spot of asparagus -

http://news.msue.msu.edu/news/article/purple\_spot\_disease\_of\_asparagus

5) Corn Maggot -

http://news.msue.msu.edu/news/article/new seed corn maggot tool avai lable on enviro weather

- 6) Such a May! Only spotty news mainly about planting, which is behind, from now on. Not many pests talked about
- 7) Late planting and wet conditions -

http://news.msue.msu.edu/news/article/late\_planting\_and\_wet\_conditions\_exacerbate\_early\_season\_onion\_weed\_problem

8) Regional reports 5-18-11 includes purple spot, cutworms, wet conditions slowing planting down, cabbage white butterflies laying eggs, common asparagus beetle adults flying -

http://news.msue.msu.edu/news/article/regional reports on michigan ve getables may 18 2011

9) Greenhouse tomato diseases -

http://news.msue.msu.edu/news/article/how to spot and stop diseases on greenhouse tomato seedlings

- 10) Asparagus pests
  - http://news.msue.msu.edu/news/article/asparagus insect pests asparagus beetle and asparagus miner
- 11) Avoiding celery black streak
  - http://news.msue.msu.edu/news/article/avoiding high risk period may help prevent black streak development in celery
- 12) Regional reports 5-25-11 includes purple spot and asparagus beetle, Colorado potato beetle emerging
  - http://news.msue.msu.edu/news/article/regional reports on michigan ve getables june 1 2011

#### June

- 13) Regional reports 6-1-11 includes wettest spring in memory and the most difficult, common asparagus beetle
  - http://news.msue.msu.edu/news/article/regional reports on michigan ve getables june 1 2011
- 14) Colorado potato beetle management
  - http://news.msue.msu.edu/news/article/colorado potato beetle insecticide resistance management
- 15) Onion weed control
  - http://news.msue.msu.edu/news/article/onion weed control
- 16) Regional reports 6-8-11 includes asparagus beetle, Colorado potato beetle, cucumber beetle, cutworms, weed infestations a problem for some <a href="http://news.msue.msu.edu/news/article/regional\_reports\_on\_michigan\_vegetables\_june\_8\_2011">http://news.msue.msu.edu/news/article/regional\_reports\_on\_michigan\_vegetables\_june\_8\_2011</a>
- 17) Forecasting potato blight
  - http://news.msue.msu.edu/news/article/forecasts\_identifying\_favorable\_en\_vironmental\_conditions\_for\_potato\_late\_blight\_
- 18) Weed control
  - http://news.msue.msu.edu/news/article/early identification and postemer gence management of broadleaf weeds in veg
- 19) Strange world of cutworms
  - http://news.msue.msu.edu/news/article/many\_cutworm\_cakes\_were\_bake\_d last\_week
- 20) Regional reports 6-15-11 includes Colorado potato beetle, cutworms, woodchuck and deer damage to young crops, monitoring diamond back moth, it has pesticide resistance and thus a serious problem, many crops behind due to weather, poor yields for root crops due to wet soils, black cutworm on field corn, asparagus rust, aster leafhoppers
  - http://news.msue.msu.edu/news/article/regional reports on michigan ve getables june 15 2011
- 21) Rust on asparagus
  - http://news.msue.msu.edu/news/article/aeciospores found on asparagus volunteers
- 22) Potato blight updates
  - http://news.msue.msu.edu/news/article/updates to the five day potato l ate blight forecast and twitter page for mi

- 23) Growing degree days
  - http://news.msue.msu.edu/news/article/growing degree day information clarifies late planting impact on crop matur
- 24) Onion diseases
  - http://news.msue.msu.edu/news/article/know your onion diseases and how to manage them
- 25) White mold in potatoes
  - http://news.msue.msu.edu/news/article/white mold or sclerotinia stem rot in potatoes
- 26) Phytophthora
  - http://news.msue.msu.edu/news/article/look for phytophthora disease on winter squash and pumpkin now
- 27) Potato blight -

### mid-June

\*\*\*For Beverly Hills Community Gardens: Squash Bugs laying eggs!

"...After mating, the female bugs lay eggs in clusters of seven to 20 in rows on the undersides of leaves in the angle formed by two leaf veins (Figure 2). Egg laying usually starts in mid-June in the Midwest and three to four weeks earlier in the southeastern United States. The eggs are about 1/16 inch in length and orange to yellow, but they turn to a metallic bronze color in a few days. Squash bug eggs will hatch in seven to 10 days under typical summer conditions. Newly hatch nymphs are wingless and pale-green to white with reddish-brown heads and legs. As the nymphs grow, they become gray and their wing pads become more and more developed..."



The squash bug: A major insect pest of



http://news.msue.msu.edu/news/article/the squash bug a major insect pest of pumpkins and squash

- 27) Regional reports 6-22-11 includes Colorado potato beetle, cucumber beetle, European corn borer, white mold (Sclerotinia) damaging tunneled tomatoes, imported cabbage worm butterflies flying and laying eggs, slow crop development due to rain, weed pressure in many asparagus fields, common asparagus beetle, rust
  - http://news.msue.msu.edu/news/article/regional reports on michigan ve getables june 22 2011
- 28) IPM for asparagus after harvest <a href="http://news.msue.msu.edu/news/article/integrated">http://news.msue.msu.edu/news/article/integrated</a> management of aspara <a href="gus following the end of the harvest period">gus following the end of the harvest period</a>
- 29) Regional reports 6-29-11 include Colorado potato beetle in all stages, bacterial spot on peppers, tarnished plant bugs causing flower abortion to corn, European corn borer moth & larva, lack of honeybees a concern, hail storm damage, wet soils dictating planting, growth and harvesting of underground crops, damping off crop death significant due to wet soils, common asparagus beetles, asparagus rust, striped cucumber beetle, finding Cercospora blight on carrots early -

http://news.msue.msu.edu/news/article/regional reports on michigan ve getables june 29 2011

## July

- 30) Regional report 7-6-11 includes Colorado potato beetle in all stages, herbicide damage to crops in high wind areas, cucumber beetles carrying bacterial wilt, thrips in seedlings, squash vine borers flying, Squash bugs laying eggs, weed control most significant problem in onions, common asparagus beetles, rust, purple spot, lots of crops about 1-2 weeks behind, aster yellows, leafhoppers <a href="http://news.msue.msu.edu/news/article/regional reports on michigan vegetables-july-6-2011">http://news.msue.msu.edu/news/article/regional reports on michigan vegetables-july-6-2011</a>
- 31) Disease in potato crops light <a href="http://news.msue.msu.edu/news/article/the">http://news.msue.msu.edu/news/article/the</a> 2011 season brings minimal diseases in potato crops
- 32) Downy mildew on cucumbers <a href="http://www.news.msue.msu.edu/news/article/downy\_mildew\_outbreak\_in\_southeast\_michigan\_on\_cucumbers">http://www.news.msue.msu.edu/news/article/downy\_mildew\_outbreak\_in\_southeast\_michigan\_on\_cucumbers</a>
- 33) Regional reports 7-13-11 includes squash vine borer, Japanese beetles, aphids, downy and powdery mildew, slow development of some crops due to weather, tarnished plant bug, root rot, purple spot and rust on asparagus, herbicide damage on asparagus more than reporter liked, sparse male blossoms hurting fruit set on vine crops, powdery mildew lesions a month earlier that usual, alternaria and cercospora blights on carrots <a href="http://news.msue.msu.edu/news/article/regional reports">http://news.msue.msu.edu/news/article/regional reports on michigan ve getables july 13 2011</a>
- 34) Downy mildew on onions <a href="http://news.msue.msu.edu/news/article/downy\_mildew\_detected\_on\_onio">http://news.msue.msu.edu/news/article/downy\_mildew\_detected\_on\_onio</a> ns so take action now
- 35) Watermelon mosaic virus <a href="http://news.msue.msu.edu/news/article/watermelon mosaic virus detected">http://news.msue.msu.edu/news/article/watermelon mosaic virus detected in winter squash</a>

Note: Early season (items 1-35) listed only moderate to serious outbreaks

36)

Regional report 7-20-11 includes squash vine borers, tomato hornworm larva, bacterial diseases, European corn borer, downy mildew, Japanese beetles, celery anthracnose, thrips, botrytis, adult Colorado potato beetle, Western bean cutworm moths and egg masses, potato leafhopper adult and nymphs, watermelon mosaic virus, angular leaf spot, aster leafhopper, alternaria and cercospora blights on carrots -

http://news.msue.msu.edu/news/article/regional reports on michigan ve getables july 20 2011

http://www.news.msue.msu.edu/news/article/western bean cutworm update for july 25 2011

37) Regional reports 7-27-11 includes squash vine borers, virus diseases, bacterial diseases, bacterial spot, European corn borer moth, corn earworm moth, western bean cutworm moth, raccoon, starlings and redwing blackbird damage on corn, cabbage worm, downy and powdery mildew, spider mites,

blossom blast from heat on tomatoes, thrips, celery leaf tier, aphids, aster leafhopper, early blight, bacterial blight, bacterial soft rot, anthracnose, Phytophthora fruit rot, purple spot, Japanese beetle, leafhoppers, aster yellows, imported cabbage worm -

http://news.msue.msu.edu/news/article/regional reports on michigan ve getables july 27 2011

38) Phytophora IPM -

http://news.msue.msu.edu/news/article/use\_integrated\_management\_strategies\_with\_phytophthora\_on\_peppers

39) Western bean cutworm links -

http://www.news.msue.msu.edu/news/article/western\_bean\_cutworms\_are\_active\_in\_sweet\_corn

### August

40) Late blight on tomatoes -

http://news.msue.msu.edu/news/article/late blight confirmed in tomatoes in essex county ontario

41) Sunscald -

http://news.msue.msu.edu/news/article/hot and sunny days promote sunscald in peppers and other vegetables

- 42) Regional reports 8-3-11 includes corn earworm, European corn borer, western bean cutworm moth and larva, downy mildew, two-spotted spider mite on melons and eggplant, cabbage butterflies (imported cabbage worm), blossom end rot on tomatoes and bell peppers, sunscald, purple blotch and botrytis on onions, variegated cutworm, aphids, spider mites, aster leafhoppers, aster yellows, tomato late blight, Colorado potato beetle, flea beetle, powdery mildew, watermelon mosaic, leafhopper <a href="http://news.msue.msu.edu/news/article/regional reports">http://news.msue.msu.edu/news/article/regional reports on michigan ve getables august 3 2011</a>
- http://www.news.msue.msu.edu/news/article/western bean cutworm update for august 2 2011
- 43) Regional reports 8-10-11 includes hail damage, standing water, downy mildew, bacterial spot and speck, mites, bacterial soft rot, corn earworm, European corn borer, radial cracking on tomatoes, fruit abortion in summer squash, powdery mildew, aphids, variegated cutworm, Celery anthracnose, aster leaf hoppers, purple spot, anthracnose, foliar diseases, western bean cutworm moth and larva, Phytophthora wilt, Watermelon mosaic virus, aster yellows, blossom abortion in snap beans <a href="http://news.msue.msu.edu/news/article/regional reports on michigan vegetables august 10 2011">http://news.msue.msu.edu/news/article/regional reports on michigan vegetables august 10 2011</a>
- 44) Regional reports 8-17-11 includes bacterial diseases, powdery mildew, Tobacco hornworms, beneficial parasites, downy mildew, Phytophora capsici, European corn borer, bacterial rot and thrips on cabbage, thrips, purple blotch, Stemphyllium leaf blight, and bacterial soft rot on onions, aphids, aster leafhoppers, variegated cutworm, Celery anthracnose, rust, aster yellows, Watermelon mosaic virus
  - http://news.msue.msu.edu/news/article/regional reports on michigan ve getables august 17 2011

- 45) Bacterial spot on peppers <a href="http://news.msue.msu.edu/news/article/bacterial\_spot\_damages\_michigan\_peppers1">http://news.msue.msu.edu/news/article/bacterial\_spot\_damages\_michigan\_peppers1</a>
- 46) Bacterial canker on tomatoes <a href="http://news.msue.msu.edu/news/article/bacterial canker ravages processing">http://news.msue.msu.edu/news/article/bacterial canker ravages processing tomatoes</a>
- 47) Regional reports 8-24-11 includes disease on vine crops, bacterial problems on tomatoes, bacterial spot on peppers, Phytophthora blight and powdery mildew on squash family, black spot on watermelon, squash bugs, European corn borer, verticillium wilt on eggplant, western bean cutworm, corn earworm
  - http://news.msue.msu.edu/news/article/regional reports on michigan ve getables august 24 2011
- 48) Regional reports 8-31-11 includes corn earworm, downy mildew <a href="http://news.msue.msu.edu/news/article/regional\_reports\_on\_michigan\_vegetables\_august\_31\_2011">http://news.msue.msu.edu/news/article/regional\_reports\_on\_michigan\_vegetables\_august\_31\_2011</a>

### September

- 49) Regional reports 9-7-11 includes virus in vine crops, powdery mildew on pumpkin, European corn borer, corn earworm <a href="http://news.msue.msu.edu/news/article/regional reports on michigan vegetables-september-7-2011">http://news.msue.msu.edu/news/article/regional reports on michigan vegetables-september-7-2011</a>
- 50) Asparagus aphids <a href="http://news.msue.msu.edu/news/article/check\_your\_asparagus\_field\_for\_a">http://news.msue.msu.edu/news/article/check\_your\_asparagus\_field\_for\_a</a> <a href="phids">phids</a>
- 51) Regional report 9-14-11 includes Phytophthora fruit rot, corn and broccoli worms <a href="http://news.msue.msu.edu/news/article/regional report on east michigan vegetables september 14 2011">http://news.msue.msu.edu/news/article/regional report on east michigan vegetables september 14 2011</a>
- 52) Regional reports 9-21-11 includes aphids, broad mite, virus diseases, European asparagus aphids <a href="http://news.msue.msu.edu/news/article/regional reports on michigan vegetables\_september\_21\_2011">http://news.msue.msu.edu/news/article/regional reports on michigan vegetables\_september\_21\_2011</a>
- 53) Brown marmorated stink bug http://ipmnews.msu.edu/vegetable/vegetable/tabid/151/articleType/ArticleV iew/articleId/3251/Update-on-finding-the-brown-marmorated-stink-bug.aspx
- 54) Potato psyllids <a href="http://ipmnews.msu.edu/vegetable/vegetable/tabid/151/articleType/ArticleV">http://ipmnews.msu.edu/vegetable/vegetable/tabid/151/articleType/ArticleV</a> <a href="mailto:iew/articleId/3266/Potato-psyllids-and-zebra-chip-disease.aspx">iew/articleId/3266/Potato-psyllids-and-zebra-chip-disease.aspx</a>
- 55) Broad mite http://ipmnews.msu.edu/vegetable/vegetable/tabid/151/articleType/ArticleV iew/articleId/3303/Broad-mite-Not-your-typical-Michigan-mite.aspx