2015 “Ask a Master Gardener”
Plant Clinic Meeting
Vegetable & Fruit Update

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Jazz up your Ask a MG table with plants and quiz questions
Tips for IPM success...

• **Don’t jump to conclusions.** Less than ½ of homeowner plant problems are caused by living organisms. Many problems have multiple causes.

• **Don’t buy into client panic.** How serious is the problem?; is it getting worse?

• **Keep learning.** Visit UME web sites and other science-based resources.
“I’m having a problem with my kale plant…”

Seriously?
Messages for clientele

• It’s easier to prevent a problem than cure one
• Spend time observing your plants; look under leaves for pest problems
• Learn to tolerate some damage
• Learn to cut your loses. Sometimes it’s best to “rip up and replant”
• Never spray insecticides during bloom
Frost/cold injury- leaf whitening, small gray/brown spots, or blotches

Phosphorous deficiency early in season due to cool soil and small root system
Night-feeding beetle injury
The kudzu bug has arrived—late season feeding possible on all garden beans.

http://mdkudzubug.org/
Whose been eating my rhubarb... and my beans?
Mexican bean beetle - “skeletonizer”
Squash beetle

Three life stages of the squash beetle. Similar in appearance and feeding habit to Mexican bean beetle.
Harlequin bug - USDA testing aggregation pheromone for trapping
BMSB 2nd to 5th instar

USDA ARS

Feeding injury on pepper
Eggplant leaves coated with Surround (kaolin clay)
Downy mildew symptoms early and advanced - top of leaf
Downy mildew symptoms - leaf underside

Gray fungal growth and black spores appear on leaf underside with cool, moist conditions.
Early blight (fungal disease) - tomato
Late blight – *Phytophthora infestans*

http://vegetablemdonline.ppath.cornell.edu/
‘Iron Lady’ - Cornell release. Resistance to root diseases (Fusarium and Verticillium) and late blight and Septoria; tolerance to early blight.
White rot is #1 disease problem. Garlic bloat nematode and bulb mite are relatively new threats to MD garlic. Buy from reputable growers who have their crops screened and tested.
Basil downy mildew
Spotted wing drosophila
Life Cycle of the Spotted Wing Drosophila
*Drosophila suzukii* (Matsumura)

- **Eggs**: 12-72 hours
  - *350+ eggs in a lifetime*
- **Three Larval Instars**: 5-7 days
- **Pupation**: 4-15 days
  - *Inside or outside of fruit*
- **Adults**: 20-30 days

[http://whatcom.wsu.edu/ipm/swd/slides.html](http://whatcom.wsu.edu/ipm/swd/slides.html)
Spotted wing drosophila (swd) monitoring trap made from clear plastic container with lid and ¼-inch holes drilled near the top to allow flies to enter.

Bait: 1 Tbsp. active dry yeast and 4 Tbsp. sugar dissolved in 12 oz water (better than apple cider vinegar).