


Consumer based apple & raspberry inquiries

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Resources

- learningstore.extension.wisc.edu
- horticulture.extension.wisc.edu
- go.wisc.edu/planthealthadvising
(plant and insect diagnostic link)

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Client inquiry, June 2019:

- My apple tree did not bud out in the spring. Is it still alive or dead? What happened to it?

Is it still alive or dead?

- Scratch the inner bark of the twig or dissect a bud

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Why the tree collapsed? Part 1: Leading questions to ask

1. What cultivar is it?
2. Did you notice anything unusual on the tree this spring or last winter or a year before?
(dried leaves hanging, bark chewed, gums oozing, crack in the bark)
3. Do you have any other trees near by? How do they look like?
4. Where was the tree located in your yard? Any low lying areas or to a road side? Are there any weeds near by the trunk?

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5. Did you spray your apple tree last growing season? Prune? Apply any herbicides?
6. How was the winter/ spring weather in your area?
7. What could have happened to the tree?
8. Can you email some pictures of your entire tree and its surrounding landscape?

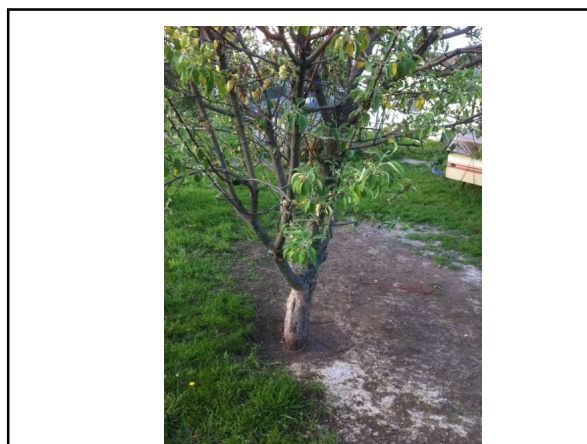
Fruits & Vegetables

Name _____
Address _____
City _____, WI _____
Phone _____
Email _____
Check one: Homeowner/Visitor Commercial Use

1. Type of fruit/vegetable: _____
2. When did symptoms first occur? _____
3. Have symptoms in other _____ sites _____ both here and elsewhere
4. How many plants are affected? _____ just one _____ good to all _____ different species
5. Plant is _____ selfed _____ in low area _____ on a slope _____ in association with terrain
6. List pesticides, fertilizers, etc. that have been applied: _____
7. Are there any black webbing or tubular trees within canopy of your yard/garden? _____ Yes _____ No
8. Has the soil been tested? _____ Yes _____ No
9. Crown bark _____ normal _____ oozing _____ peeling _____ flaking _____ cracked _____ fissured _____ peeling
10. Bark/bud scale _____ normal _____ swollen _____ webbed _____ flaking _____ oozing
11. Branch bark _____ normal _____ poor growth _____ bark loss _____ cracked _____ oozing
12. Frost or hot low temperatures _____ normal _____ oozing _____ bark loss _____ cracked _____ flaking
13. Fruit/vegetable leaf buds _____ normal _____ poor growth _____ webbed _____ shriveled _____ oozing
14. How often and how much to plant material? _____
15. Other comments: _____

Diagnostic inquiry sheets – go.wisc.edu/planthealthadvising
Scroll to online training hub

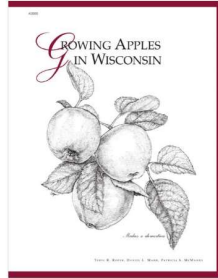
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Part 2: Analyze the info

- Check the common problems associated with apple trees
- Based on the info, confirm if it is biotic or abiotic



Part 3: Recommendation

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How to prune apple trees?

- learningstore.extension.wisc.edu
- A 1959: Training and Pruning Apple Trees by T.R. Roper
- YouTube from UMN Extension
- <https://youtu.be/rEMpLjGhQUQ>



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Identifying an apple variety?

- <https://wisconsinapplegrowers.org/>



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Poor or no blossoms?

- Lack of light
- Know your root stock - Standard root stock triggers blossoms 5-7 years after planting
- Heavy pruning
- Too much fertilizer



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No fruit set?

- Pollination issue
 - Need at least 2 different cultivars or a flowering crabapple tree
 - Blooms at the same time
 - Pollen compatibility (Matsu, Winesap, gravenstein – triploid chromosomes)
 - Lack of bees (sprayed any insecticides during blooming period)
 - Heavy rain or sudden drop in temperature during bloom time

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Did not leaf out this year?

- Maintenance history/ pre-existing condition
- Rodent injuries – voles, rabbits, deer
- Winter injury - rootstock, scion



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Rodent injury? – Bridge grafting



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Premature fruit drop?

- Codling moth
- Apple maggot

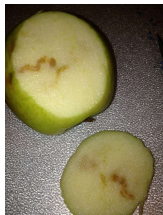
A2179: Apple Pest Management for Home Gardeners

<http://learningstore.extension.wisc.edu>

Diagnosing apple problems
go.wisc.edu/planthealthadvising



Codling moth damage
(Photo credit: Colorado state university Extension)



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Dwarf apple tree outgrown its normal size?



Scion Rooting

Photo Courtesy: Dr. Teryl Roper, Former UW Extension Fruit Specialist

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Branches/ entire tree collapsed during growing season?



Fireblight disease

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Severe foliage leaf drop during growing season?



Apple scab



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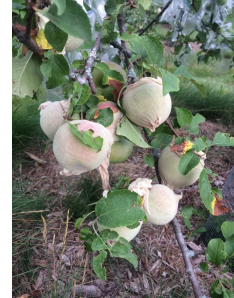
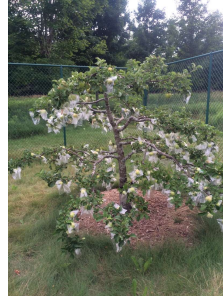
Russetting on fruit skin?



Copper spray injury

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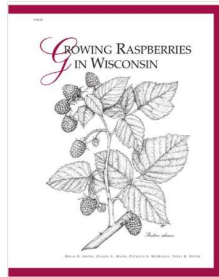
Mechanical way to manage apple pest?



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Raspberry canes stunted or poor growth?

- Root rot infection
- Virus infected plants
- Too old



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Raspberries did not bear any fruits?

- Improper pruning and timing (summer bearing vs everbearing)
- Cold injury (<-20 F)
- Over fertilization
- Poor management

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Crumbly, faded fruits?



Fruit scald injury – direct exposure to sunlight, lack of foliage to cover the fruit

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Wilted cane tips?

- Raspberry cane maggot
- Raspberry cane borer



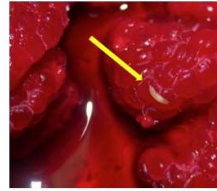
Raspberry cane maggot – wilt and break, swollen tissue, early summer



Raspberry cane borer – two rows of punctures around cane tips

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Wormy berries – Spotted wing drosophilla



SWD Larva on Raspberry – whitish, as indicated by arrow. Note the liquefied fruit material under the berries.



Raspberries destroyed by SWD larvae – recently-picked berries have become completely liquefied.

Photo credit: Phil Pellitteri, UW-Madison Insect Diagnostic Lab

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