Consumer based apple & raspberry inquiries

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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

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?
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?

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

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

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

Identifying an apple variety?

• https://wisconsinapplegrowers.org/

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

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
Did not leaf out this year?

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

Premature fruit drop?

- Codling moth
- Apple maggot

Branches/ entire tree collapsed during growing season?

- Fireblight disease

Rodent injury? – Bridge grafting

Dwarf apple tree outgrown its normal size?

Severe foliage leaf drop during growing season?

- Apple scab
Russetting on fruit skin?

Mechanical way to manage apple pest?

Raspberry canes stunted or poor growth?
- Root rot infection
- Virus infected plants
- Too old

Raspberries did not bear any fruits?
- Improper pruning and timing (summer bearing vs everbearing)
- Cold injury (<-20 F)
- Over fertilization
- Poor management

Crumbly, faded fruits?

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

Wormy berries – Spotted wing drosophilla

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