### CHERRY PLANT DISEASES

#### BACTERIAL CANKER
- Bacterial condition from *Pseudomonas syringae*
- Symptoms include limb dieback, loss of fruit spurs, amber-colored gum, “dead bud”, and leaf spotting
- Inner bark may be brown, fermented and sour-smelling
- Young trees most affected
- Spread by splashing rain, favored by high moisture and low spring temperatures
- Overwinters in cankers and systemically infected branches and buds

#### BROWN ROT
- Fungal infection from *Monilinia fructicola*
- First sign of infection is brown, wilted blossoms
- Dark, sunken spots develop on new shoots and limbs
- Fruit develops fuzzy tan/grey spores on fruit surface
- Fruit mummies turned shriveled and dark can cause recontamination if left
- Overwinters in twig cankers and mummified fruit on the ground and in tree

#### BLACK KNOT
- Fungal infection from *Apiosporina morbosa*
- Originates in spring growth - producing small, light brown swellings that rupture
- Young knots are soft, and velvety, olive-green and become hard, brittle, rough and black by autumn
- Fungus overwinters in knot and worsens from year to year
- Tips of branches can die back and severe cases can kill whole limbs
### CHERRY PLANT DISEASES

#### POWDERY MILDEW
- Fungal infection from *Podosphaera clandestina*
- Attacks leaves, twigs, and fruit
- Produces whitish powdery mildew
- Infected leaves curl upward and new leaf and shoot growth is stunted
- Overwinters in twigs and fallen leaves
- Spread via wind through dry summers with high humidity that produce morning fog or dew

#### CHERRY LEAF SPOT
- Fungal infection from *Blumeriella jaapii*
- Overwinters in dead leaves on the ground and spreads in early spring during rainy weather
- Produces purplish, red, black, brown spots on leaves which yellow and fall
- Tree’s can become defoliated during humid summers, becoming more prone to winter injury, poor fruiting bud formation, and slow spring growth

### OTHER CHERRY PROBLEMS

#### BIRD PREDATION
- Birds can sometimes cause considerable crop losses for sweet cherries, sometimes stripping trees of fruit entirely
- Major bird offenders: American robins, common grackles, cedar waxwings, sparrows, and crows.
- Birds appear in groups, feeding on ripe fruit quickly, then moving on - making control challenging
- Birds often feed heaviest on early-ripening fruit as it may be the only early food source available

#### FRUIT CRACKING
- Fruit cracking occurs from exposure to too much water either in the soil or on the fruit surface
- Prolonged exposure of water on the fruit surface can lead to fruit absorbing that water, expanding and cracking
- Fruit can also crack during heavy rains and prolonged wet soil conditions coupled with low evapotranspiration.
- Poor drainage, heavy rains, and prolonged cloudy conditions can contribute to this
**CHERRY PEST AND INSECT DAMAGE**

### BLACK CHERRY APHIDS

- Black cherry aphid *Myzus cerasi* attacks mostly sweet cherries
- Overwinters as an egg on branches and hatches at bud break to eat young tissue
- Stunts terminal growth and curls leaves and as aphids suck the tree’s fluids
- Produce honeydew, a sticky substance that attracts ants and produces a sooty mold
- Adults are ⅛” shiny black winged or wingless and lay eggs in fall
- 2-3 generations occur by early July

### CHERRY FRUIT FLY

- *Rhagoletis indifferens* feeds on tart, sweet and wild cherries
- Fly’s larvae develops in ripening cherries
- Larva is creamy white legless maggot, which exits cherry to pupate leaving holes
- Differentiated from *Drosophila* fruit fly (attack cracked fruit) by larva’s posterior enlarged with three horizontal black lines
- Adult has black body with white line markings on abdomen
- One generation per year
- Pupae overwinters in the soil

### ORIENTAL FRUIT MOTH

- Eggs appear as white flat ovals on the undersides of the leaves
- 1st generation larvae bore into growing shoots, causing terminal wilt and die back of new growth in spring, flagging
- Some 2nd, and most 3rd and 4th generation larvae attack fruit leaving a hole found in the side of the fruit with brown goo and powdery substance nearby
- Overwinters as a fully grown larva protected within a silk cocoon located in tree crevices or in orchard ground cover.

### PEAR SLUGS

- Yes they attack cherries too!
- Not a true slug, but a sawfly with a slug-like larva body
- Adults emerge late spring to lag eggs
- Eggs on leaves appear as small blisters
- Larva passes through 5 instar stages to adulthood, in which it turns into a glossy black wasp ½”
- The slug-like larva feeds on the leaves of pear trees, skeletonizing them
- Leaves turn brown, wither and drop on heavily infested trees
- Overwinters in cocoon 2-3” under soil

**NOTE:** Once a specific problem is identified, consult guidebooks or POP’s website (phillyphorchards.org/search) to find more info on recommended management practices.
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<table>
<thead>
<tr>
<th>CHERRY PEST INSECTS</th>
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<tbody>
<tr>
<td><strong>LESSER PEACH TREE BORER</strong></td>
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<tr>
<td>![Image]</td>
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<tr>
<td>- Yes they attack cherries too!</td>
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<tr>
<td>- Day flying adults resemble wasps</td>
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<tr>
<td>- 2-3 generations per season with first flight May-June, second August-September</td>
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<tr>
<td>- Adults lays eggs in cracks of bark</td>
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<tr>
<td>- Attacks entire tree</td>
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<tr>
<td>- Larva immediately burrow into bark, feed on inner bark and cambium,</td>
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<td>- Wounds ooze gum, frass and wood bits</td>
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| **GREATER PEACH TREE BORER** |
| ![Image] |
| - Yes they attack cherries too! |
| - Black moth that resembles a wasp |
| - Adults lay eggs in cracks of bark |
| - Larva immediately tunnel and feed on the sapwood of lower trunk and major roots |
| - 1 generation per season |
| - Overwinters beneath bark underground |
| - Injury emmits jelly like sap mixed with frass and bits of wood at the base of the trunk |

| **SAN JOSE SCALE** |
| ![Image] |
| - Sucking insect injects toxins into plant that causes reddish blisters and purplish-red halos on young bark |
| - Winged males and wingless females emerge in spring, crawlers appear on whole plant |
| - After settling down, crawlers excrete a permanent waxy barrier to protect themselves from pesticides - female scales |
| - Results in reduced vigor, thin foliage, and cracked or dying branches |
| - Immature scales overwinter predominantly in black cap stage |

| **PLUM CURCULIO** |
| ![Image] |
| - Yes they attack cherries too! |
| - ¼” long dark brown beetle with white patches and four humps on its back |
| - Appear in orchards during bloom |
| - Adults make crescent-moon shaped punctures on the fruit to lay eggs and feed |
| - Pearly white eggs laid in cavity of crescent flap hatch in 7 days and feed on buds, petals and blossoms |
| - Can cause deformed fruit and premature drop |
| - Overwinter in nearby brush and soil |
### Spotted Wing Drosophila

- A fly that constantly attacks all soft fruit
- Adults are small (2-3 mm) flies with red eyes, a pale brown body and black stripes
- Adult males have a black spot on wing tips.
- Adult females have serrated ovipositors that pierce fruit skin to lay eggs
- Eggs have two breathing tubes often visible
- Larvae are tiny (up to 3.5 mm), white cylindrical maggots that feed in the fruit
- Larvae partly or completely exit to pupate.
- They are most active at 68°F; activity reduces at temperatures above 86°F
- Affected fruit can turn brown and soft or look bruised; sunken areas leak liquids.
- Populations can grow quickly
- May overwinter as adults, be reintroduced from shipments of infected fruit or migrate north every summer.

### Speckled Green Fruitworm

- Most common of several green fruitworm pests in orchards
- Larvae feed on a variety of deciduous shade, forest, and fruit trees like apple, pear, and cherry.
- Adults are night-fliers whose flight period closely parallels apple bud development.
- Newly hatched larvae are ¼ inch long and have a grayish body, brown head and thoracic shield.
- Mature larvae are 1 ½ inches long light green bodied with narrow white stripes and speckles
- Older larvae damage flower clusters during bloom and continue to feed on developing fruit and leaves for 2 to 3 weeks after petal fall. They drop to the ground, to pupate in soil over winter
- Most flower buds, blossoms, and fruitlets damaged by larvae abort. Some, however, remain at harvest and exhibit deep corky scars and indentations.