Newer Fruit Crop Production – Sour Cherry and Haskap / Blue Honeysuckle

Alberta Farm Fresh School 2016
Olds, AB

Outline

- Dwarf Sour Cherry Production
- Haskap / Blue Honeysuckle Production
  - History
  - Varieties
  - Planting / Establishment
  - Maintenance
DWARF SOUR CHERRIES

Dwarf Sour Cherries

Prunus cerasus (Sour Cherry)
15-20m (49-65ft) (on own roots)
dark or light flesh; dark or red skin

Prunus fruticosa (Mongolian Cherry)
1-3m (3-10ft)
spreading; suckering
reddish, pea-sized, very sour fruit

Prunus cerasus (Sour Cherry)

Improved Mongolian

Dwarf Sour Cherry
2-3m (6-10ft)
Less suckering than Mongolian
Large, tart fruit – dark skin & flesh
Individual Dwarf Sour Cherry
(U of S – Saskatoon, SK)

History

- Breeding of the current U of S dwarf sour cherries started in the 1940’s
- **Evans Cherry** was released in ??
  - It has been widely available since the late 80’s to early 90’s
- U of S released SK Carmine Jewel in 1999
- U of S released the Romance series (5 cultivars) in 2004
Uses

- Quality is such that fresh eating is possible
- Processing cherries (mainly)
  - Jams / Jellies / Syrups
  - Pies / Pie Filling
  - Dried fruit
  - Syrup
  - Juice
  - Chocolate covered (yeah, that’s right)
  - Wine
- Cherry sausage, etc.

Biology

- Shrubs are dwarf on their own roots
- Fruit
  - Drupe with a single seed (i.e. cherry)
- Flowers
  - White flowers with long pedicels (stems)
  - Single or in 5 flower clusters
    - On sides of branches on young wood
    - On spurs on older wood
### Flowering / Pollination

- **Plants flower in mid to late May**
  - Open slightly before leaves
- **All flowers open within 1 week of each other**
  - Delayed blooming can be an indication of winter injury
- **Self-fruitful**
  - Can be self-pollinated
- **Bees are necessary for pollen transfer**
  - **Bees will increase pollination and yields**

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**SK Carmine Jewel** – at the end of flowering, with small fruit (Ferintosh, AB)
Dormancy

- Starts when days shorten and temperatures start to drop below 7°C
- Develops from the tips of branches inward to the roots
- Trunks by the ground are last to enter dormancy
- There should be buds forming at branch tips by the first frost

Winter injured Evans cherries
(Andrew, AB)
Photo by Sharon Faye
CULTIVARS

SK Carmine Jewel
<table>
<thead>
<tr>
<th></th>
<th>Fruit Colour</th>
<th>Avg Fruit Size (grams)</th>
<th>Pit Shape</th>
<th>Pit Size</th>
<th>° Brix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SK Carmine Jewel</strong></td>
<td>Dark purple skin &amp; flesh</td>
<td>3.5</td>
<td>Round</td>
<td>Small</td>
<td>16-18</td>
</tr>
<tr>
<td><strong>Romeo</strong></td>
<td>Dark red to black</td>
<td>4</td>
<td>Round</td>
<td>Small</td>
<td>Sweeter than SCJ</td>
</tr>
<tr>
<td><strong>Valentine</strong></td>
<td>Medium red</td>
<td>4.5</td>
<td>Round</td>
<td>Small</td>
<td>?</td>
</tr>
<tr>
<td><strong>Juliet</strong></td>
<td>Dark red</td>
<td>5</td>
<td>Round</td>
<td>Large</td>
<td>20</td>
</tr>
<tr>
<td><strong>Crimson Passion</strong></td>
<td>Dark red</td>
<td>6</td>
<td>Round</td>
<td>Large</td>
<td>22-24</td>
</tr>
<tr>
<td><strong>Cupid</strong></td>
<td>Dark red to black</td>
<td>6.5</td>
<td>Elongated</td>
<td>Large</td>
<td>?</td>
</tr>
</tbody>
</table>
### Cultivar Comparisons

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Bush Height</th>
<th>Average Maturation Time</th>
<th>Amount of Suckering</th>
<th>Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK Carmine Jewel</td>
<td>2m / 6.5ft</td>
<td>Late July – early August</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Romeo</td>
<td>2m / 6.5ft</td>
<td>Late August – early Sept</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Valentine</td>
<td>2.5m / 8ft</td>
<td>Early August – mid August</td>
<td>Some</td>
<td>Good</td>
</tr>
<tr>
<td>Juliet</td>
<td>2m / 6.5ft</td>
<td>Early – Mid August</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Crimson Passion</td>
<td>1.75m / 5.5ft</td>
<td>Mid August</td>
<td>Least of 6</td>
<td>Average</td>
</tr>
<tr>
<td>Cupid</td>
<td>2m / 6.5ft</td>
<td>Late August – early Sept</td>
<td>Low</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

### Uses and Other Information

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Uses</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK Carmine Jewel</td>
<td>Processing Fresh</td>
<td></td>
</tr>
<tr>
<td>Romeo</td>
<td>Fresh eat Processing</td>
<td>Can be over-productive – needs regular pruning</td>
</tr>
<tr>
<td></td>
<td>Juice</td>
<td></td>
</tr>
<tr>
<td>Valentine</td>
<td>Processing Pies</td>
<td>One of most productive Tart flavour</td>
</tr>
<tr>
<td>Juliet</td>
<td>Excellent fresh</td>
<td>Some people think this is the best fresh selection</td>
</tr>
<tr>
<td></td>
<td>Processing</td>
<td></td>
</tr>
<tr>
<td>Crimson Passion</td>
<td>Excellent fresh</td>
<td>More firm flesh</td>
</tr>
<tr>
<td></td>
<td>Processing</td>
<td></td>
</tr>
<tr>
<td>Cupid</td>
<td>Very good fresh</td>
<td>Slightly astringent 1 week later blooming Different genetics</td>
</tr>
<tr>
<td></td>
<td>Processing</td>
<td></td>
</tr>
</tbody>
</table>
ORCHARD ESTABLISHMENT

Site Selection / Requirements

- Gentle (1-3%) NE slope
  - Air and water drainage
  - Avoid SE and W slopes
    - Keep them from earlier flowering – frost risk
- Weed-free site
- Well-drained loam to sandy loam soil with good OM and neutral pH
  - 2-3% Organic Matter (OM)
  - pH = 6.5-8
### Planting – Spacing & Depth

- **In-row Spacing**
  - 1.5-2m (5-7 ft)
- **Between row Spacing**
  - Mechanical harvest = 5-6m (16.5-20 ft)
  - U-pick / hand harvest = 3.5-4m (11.5-13 ft)
- **Depth**
  - 2.5-5cm (1-2 in) deeper than depth in nursery

### Planting – Orientation

- **Orient rows N/S, if possible**
  - Plant following contour if slope or other factors make it necessary
Planting – Timing

- **Spring planting = preferred**
  - Cold treated or dormant plants = burst of growth in 1st year
  - Active plants = more roots in 1st year
  - What you get depends on the source
- **Late summer planting**
  - Starve fertilizer to slow or stop growth & encourage dormancy

Planting cont’d

- **Plant by hand or mechanically**
  - Ensure accurate planting depth
- **Water immediately after planting**
- Can plant in bare soil or plastic mulch
- **Can prune at planting**
  - To encourage more side growth & an open centre
  - Remove 1 inch of tip or up to 1/3 of shoot growth
Cherries – planted with bare ground at mechanical row spacing (U of S plots – Saskatoon, SK)

Mature sour cherry orchard – closer spacing (Over The Hill Orchards – Lumsden, SK)
Mature sour cherry plants
(Over The Hill Orchards – Lumsden, SK)

ORCHARD MAINTENANCE
Fertility

- Soil test before planting
  - Know benchmark soil data
- Any applied fertilizer should be applied in early spring, not late summer
  - Limited N required
  - No response to P
  - Some response to K
- Foliar tissue testing can detect deficiencies

Irrigation

- Water immediately after planting
- Water during first 3 years (establishment)
- Water is required:
  - To get consistent yields
  - Establishment
  - Flower bud initiation
  - Fruit sizing
- Drip irrigate, NOT sprinkler
  - Reduces leaf diseases, fruit cracking
Dryland Production

- Possible, BUT must:
  - Irrigate during establishment
  - Trap snow (shelterbelts)
  - Control weeds
  - NO grass in alleys

Pruning

- Required to:
  - Maintain an open centre & keep canopy density down
  - Remove excess suckers
  - Start regular pruning once mature height is reached
  - In late winter or early spring
    - Remove 1/6 to ⅛ of largest and oldest branches and some centre trunks at the base
In-row & Between-row Space Management

- **In-row**
  - Bare ground, plastic mulch &/or organic mulch
- **Between-row spaces**
  - Grass or leave bare
  - Depends on
    - soil type
    - moisture levels

Harvest

- **Starts fruiting in 3rd year** (depending on variety, location, etc.)
  - Expect full harvest maturity and production by Year 7
- **Harvest period**
  - 5-6 week window (~3 weeks per variety)
  - Late July to mid to late August
- **Harvest when fully ripe**
  - Not just when colour up – can take 2+ weeks to fully ripen
  - Use taste, sugar content, fruit retention
Harvesting Methods

- Hand
- Shaking with a catch frame
- Mechanical harvesters

- Harvest in morning (or in cooler conditions)
  - Fruit is cooler and more firm
    - Less damage
    - Quicker to cool

Yield

- Estimated at 10-15kg / mature tree
### Post-harvest Processes

- Cooling
  - A.S.A.P.
- Remove debris
- Sort / Grade
- Pitting
  - Mechanical
  - Various machines and methods
- Freezing
- Processing

### Pest Management

- Vertebrate pests
  - Deer
  - Voles / mice
  - Rabbits
  - Birds
- Cherry Fruit Fly
- Cherry Leaf Spot
- Bacterial canker
Blue Honeysuckle / Haskap

Blue Honeysuckle

- a.k.a. Haskap; a.k.a. Honeyberry
- *Lonicera caerulea*
- Found across Canada
  - Some uptake into areas of the United States
- Until recently, availability had been limited to ornamental plant selections
### Fruit Uses

- **Japanese market = Haskap = many uses**
- **Canadian market**
  - Fresh; jams or jellies; dessert ingredient; etc.
  - Wines?
  - Dried Haskap?
- **First fruit of the season**
  - Compared to other prairie fruit – e.g. strawberries, raspberries, Saskatoon berries, sour cherries, apples
- **High stability of fruit juice pigments**

### History

- **Grown in Japan (Hokkaido Island) for centuries**
  - Grown in Russia for 50-60 years
- **Relatively new to Canada (as a cultivated crop)**
  - Plant samples have been found across Canada
- **Breeding:**
  - Oregon (uses Japanese selections)
  - U of Saskatchewan Domestic Fruit Program
    - About a decade
    - Uses Russian, Kuril Island crosses
Variability in fruit shape in *Lonicera* species

<table>
<thead>
<tr>
<th>Characteristics of Different Plant Material (Germplasm)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fruit Size</strong></td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
</tr>
<tr>
<td><strong>Cold Hardy?</strong></td>
</tr>
<tr>
<td><strong>Fruit Shape</strong></td>
</tr>
<tr>
<td><strong>Harvest season</strong></td>
</tr>
<tr>
<td><strong>Ripening</strong></td>
</tr>
<tr>
<td><strong>Disease Resistance</strong></td>
</tr>
<tr>
<td><strong>Flavour</strong></td>
</tr>
</tbody>
</table>

Photo by Bob Bors
# Biology

- **Height (average)** = 1.5-2 m (4-6 feet)
  - On own roots
- No suckers
- **Flowers**
  - Born in pairs
  - Pale yellow/white flowers
- **Fruit**
  - Tubular shape
  - Made up of 2 ovaries each (1 flower per ovary), with a sheath that covers and joins the 2 ovaries

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**Individual Haskap bushes**

Photo by Sharon Faye
Note – opposite leaves

Honeysuckle bush in flower
Honeysuckle flowers

Immature fruit

Photo by Bob Bors
Fruiting Blue Honeysuckle – Note – presence of both ripe and green fruit

Another fruiting Haskap selection
Hardiness

- All plant parts are very hardy
- Dormant plants = -45°C
- Young, active shoots = -18°C
- Open flowers = -7°C
Varieties

- **Old Russian types (a.k.a. Honeyberries)**
  - Berry Blue, Blue Belle, etc
  - Typically **more irregular in shape**

- **Japanese varieties**
  - Typically **later flowering and somewhat less hardy**

- **U of Saskatchewan breeding program**
  - Borealis; Tundra; Indigo Treat; Indigo Yum; Indigo Gem
  - **New varieties coming out**
  - **U of SK cultivars = larger fruit, more uniform, better taste, hardier, minimal Powdery Mildew**

U of S fruit photos by Dr. Bob Bors
### Varietal Comparisons

<table>
<thead>
<tr>
<th>Russian Varieties</th>
<th>Target Market</th>
<th>Avg Berry Size (grams)</th>
<th>Yield</th>
<th>Berry Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various</td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Tundra</strong></td>
<td>Commercial / Mechanical</td>
<td>1.49</td>
<td>Good</td>
<td>Long, flat, bullet / oval-shaped</td>
</tr>
<tr>
<td><strong>Borealis</strong></td>
<td>Home Garden</td>
<td>1.62</td>
<td>Good</td>
<td>Short, flat, boxy</td>
</tr>
<tr>
<td><strong>Indigo Gem (9-15)</strong></td>
<td>Processing?</td>
<td>1.30</td>
<td>2x other selections</td>
<td>Robust, short oval-shaped</td>
</tr>
<tr>
<td><strong>Indigo Treat (9-91)</strong></td>
<td>Unknown</td>
<td>1.41</td>
<td>Good</td>
<td>Flat cylindrical</td>
</tr>
<tr>
<td><strong>Indigo Yum (9-92)</strong></td>
<td>Unknown</td>
<td>1.29</td>
<td>Good</td>
<td>Long flat oval-shaped</td>
</tr>
</tbody>
</table>

### Varietal Comparisons

<table>
<thead>
<tr>
<th><strong>Honeybee</strong></th>
<th><strong>Aurora</strong></th>
<th><strong>Boreal Blizzard</strong></th>
<th><strong>Boreal Beauty</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Market</td>
<td>Undetermined (meant as a pollinator)</td>
<td>Home Garden</td>
<td>Fresh Market / U-pick</td>
</tr>
<tr>
<td>Avg Berry Size (grams)</td>
<td>1.9</td>
<td>1.9</td>
<td>2.8-3.9</td>
</tr>
<tr>
<td>Yield</td>
<td>Good</td>
<td>Good</td>
<td>Large</td>
</tr>
<tr>
<td>Berry Shape</td>
<td>Cylindrical</td>
<td>Pointed pear</td>
<td>Football-shaped</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Thick heart or thick oval</td>
</tr>
</tbody>
</table>
## Varietal Comparisons (cont’d)

<table>
<thead>
<tr>
<th></th>
<th>Flavour</th>
<th>Suitability for mech harvest / sorting</th>
<th>Firmness</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Russian Varieties</strong></td>
<td>Inferior</td>
<td>No / No</td>
<td>Variable</td>
<td>- Non-uniform ripening - Good pollinators</td>
</tr>
<tr>
<td>Tundra</td>
<td>Good</td>
<td>Yes / Yes</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Borealis</td>
<td>Best Tasting</td>
<td>No / Limited</td>
<td>Less than Tundra</td>
<td></td>
</tr>
<tr>
<td>Indigo Gem (9-15)</td>
<td>Good</td>
<td>Yes</td>
<td>Chewy</td>
<td></td>
</tr>
<tr>
<td>Indigo Treat (9-91)</td>
<td>Excellent</td>
<td>Yes</td>
<td></td>
<td>Easier to propagate than 9-92</td>
</tr>
<tr>
<td>Indigo Yum (9-92)</td>
<td>More tangy</td>
<td>Yes</td>
<td></td>
<td>Hard to propagate</td>
</tr>
</tbody>
</table>

## Varietal Comparisons (cont’d)

<table>
<thead>
<tr>
<th></th>
<th>Flavour</th>
<th>Suitability for mech harvest / sorting</th>
<th>Firmness</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeybee</td>
<td>Good (somewhat tart)</td>
<td>No</td>
<td>Good</td>
<td>Tall plant; meant as pollinator to BTI</td>
</tr>
<tr>
<td>Aurora</td>
<td>Excellent</td>
<td>Maybe / No</td>
<td>Good</td>
<td>Taller plants than Borealis; will pollinize other releases</td>
</tr>
<tr>
<td>Boreal Blizzard</td>
<td>Excellent</td>
<td>Yes</td>
<td>Very good</td>
<td>Strong, upright branches; Late flowering / ripening</td>
</tr>
<tr>
<td>Boreal Beauty</td>
<td>Excellent</td>
<td>Yes</td>
<td>Average</td>
<td>Blooms &amp; ripens later</td>
</tr>
</tbody>
</table>
ORCHARD ESTABLISHMENT / MAINTENANCE

Site Selection / Requirements

- **SOIL**
  - Will tolerate a range of soil types
  - Well-drained soil is preferred
  - Wide range of soil pH is acceptable (5-8)
  - Fairly drought tolerant (for short periods)
  - Open sunny location
Planting

- Spacing:
  - In-row
    - 1 to 1.3 m (3-4 feet) (wider spacing for individual bushes)
  - Between row
    - U-pick = 8-10 feet (2.5-3 m)
    - Mechanical harvest = 16 feet (5m)

Mulched / grassed Haskap Orchard (Andrew, AB)

Note – plants are still developing in size, but are individual bushes

Photo by Sharon Faye
Planting – cont’d

Depth:
- Plant deeper than original depth in nursery (1-2 inches)

Other:
- Manage between-row spaces similar to Saskatoon berries
  - Varies with usage, location, soil type, etc.

Fertility

- Specific fertility requirements are unknown
- General base fertility levels
  - 65 lb N/ac (70 kg N/ha)
  - 90 lb P/ac (100 kg P/ha)
  - 355 lb K/ac (400 kg K/ha)
- Apply starter fertilizer at planting (high P)
- If applying additional fertilizer, apply small amounts in the spring, rather than later in the summer
Irrigation

- Irrigate to ensure establishment (first 3 years)
- Some irrigation may be required annually (depending on soil type and location)
- Will tolerate some dryness for short periods
- Avoid late summer watering, to allow dormancy to develop

Harvest

- Plants reach full production age within a couple of years of planting
  - Limited juvenile period
- Fruit is typically ready for harvest in late June or early July
- Harvest fruit when colour has developed throughout entire fruit
  - Exterior may look ready, but inside will be green
- Fruit can be left on plants for some time
  - But, birds may eat or they may dry out
### Yield

- Early yields will be around 3 kg per bush
- Full production is estimated at around 7+ kg per bush

### Pruning

- No pruning requirement in early years
  - New shoots come from the base of the plants off the stems
- Some minimal renewal pruning may be required as plants age
  - Take out older growth – don’t remove more than 25% annually
  - Ensure good air flow in the canopy
- May need to prune to improve shape for mechanical harvesting
Pollination

- Pollinator plants are required to ensure large, high quality fruit
- Pollinators must
  - Not be directly related to fruiting bushes
  - Bloom at the approx. same time as the fruiting bushes
- Current U of S releases are related to some of the Russian varieties
## Recommended Pollinators

### Best
- **Honey Bee** *(newer release from U of S)*
  - Larger plant, average fruit, good mildew resistance
- **Aurora (from U of S)**
  - Companion to Borealis but will pollinate Tundra & Indigo series
- **Russian types (bloom same time)**
  - Berry Blue (a.k.a. Czech #17), Berel, Gerde, Ognennyi Opal or Dew Drop

### Not as good (smaller fruit)
- **Other Russian types**
  - Blue Belle, Blue Velvet, Kiev #8, Tomichka
- **U of S varieties (closely related)**

### Not recommended
- **Japanese / Kuril Island types (bloom 2-3 weeks later)**

### Table of Pollinators Compatibility

<table>
<thead>
<tr>
<th></th>
<th>Tundra</th>
<th>Borealis</th>
<th>Indigo series</th>
<th>Aurora</th>
<th>Honey Bee</th>
<th>Berry Blue</th>
<th>Blue Belle</th>
<th>Cinderella</th>
<th>Boreal Blizzard</th>
<th>Boreal Beauty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tundra</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>MAYBE</td>
<td>MAYBE</td>
</tr>
<tr>
<td>Borealis</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>?</td>
<td>NO</td>
</tr>
<tr>
<td>Indigo series</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>MAYBE</td>
<td>MAYBE</td>
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<tr>
<td>Aurora</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>?</td>
<td>NO</td>
</tr>
<tr>
<td>Honeybee</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Berry Blue</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Blue Belle</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Cinderella</td>
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Pollination Strategies

- Depending on choices of cultivars
  - Range from 1:1 ratio of pollinator to higher
  - Rule of thumb = 1:5 minimum
  - Pollinators need to be able to see both cultivars

Pollination Strategy – 1:5

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Pollination Issues?

- Low temperatures in early season
  - During flowering
  - Potential issues with pollinating insect activity
- Results in poor pollination?
  - Reduced yields

PEST MANAGEMENT
Pest Management

- No significant insect or disease issues have been identified at this point
- Powdery mildew does occur occasionally
  - Ensure good ventilation and air circulation
- Sunburn/Sunscald is also periodic
- Birds are the main pest issue
  - Netting is often required
Netting

- Almost definitely a requirement once fruiting starts
- Should be:
  - Removable
  - Ground up
  - Small hole size (½ inch netting)
- BUT:
  - Significant cost
  - Complicates orchard activities
- Range of different options available

Individual net for individual mature bush
(U of S – Saskatoon, SK)
Close up of individual bush netting

Full acre netting with pole supports (U of S – Saskatoon, SK)
Netting system for single row (Ferintosh, AB)

Note – birds were finding their way IN through an open end (but not OUT)
Net over row of Blue Honeysuckle

Fully supported netting model for larger area orchards
Key Points to Remember – Haskap

- Markets
  - Customer Acceptance?
  - Uses?
- New varieties
  - New and better coming?
  - Pollinators?
- Pest Issues
  - Birds = netting = cost effective?
QUESTIONS???

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Alberta Ag-Info Centre
310-FARM