







Blue Honeysuckle (Haskap) Production

Biology and Varieties




Blue Honeysuckle

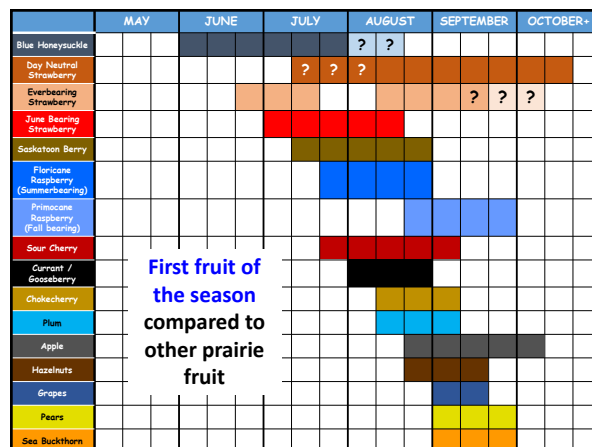
- a.k.a. Haskap; a.k.a. Honeyberry; a.k.a. Sweetberry Honeysuckle
- *Lonicera caerulea*
- Found across Canada
 - Some uptake into areas of the United States
- Until recently, availability had been limited to ornamental plant selections

Fruit Uses

- Japanese market = Haskap = many uses
- Canadian market
 - Fresh; jams or jellies; dessert ingredient; etc.
 - Wines?
 - Dried Haskap?
- High stability of fruit juice pigments

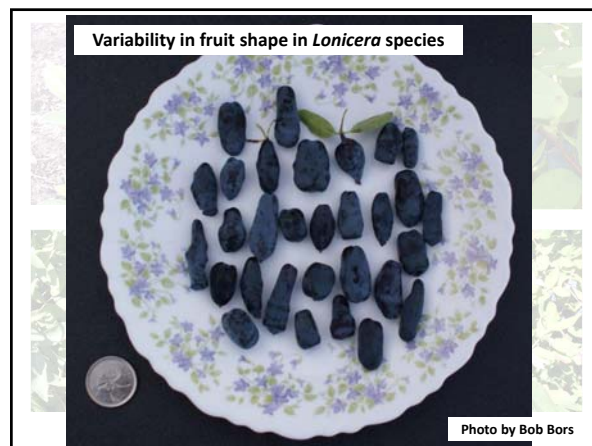


History

- 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








Characteristics of Different Plant Material (Germplasm)					
	SK	Russia	Japan	Kuril Islands	U of S varieties
Fruit Size	Small	Med to small	Large to small	Large	Large (2x Russian)
Productivity	Low	High	Variable	Low	Very High
Cold Hardy?	Yes	Yes	Unknown	Yes	Yes
Fruit Shape	Round	Tubular	Round	Oval	Round/Oval
Harvest season	Unknown	June	Probably July	July	June
Ripening	Unknown	Even	Uneven	Even	Even
Disease Resistance	Unknown	Variable	Variable	Resistant	Resistant
Flavour	Unknown	Variable	Variable	Good	Excellent


Biology

- Height (average) = 1.5-2 m (4-6 feet)
 - On own roots
- No suckers




Biology

- Flowers
 - Born in pairs
 - Pale yellow/white flowers






Biology

- **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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Hardiness

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

INSTA-POLL

“WHAT CHARACTERISTIC APPEALS TO YOU THE MOST?”

VARIETIES

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 = Boreal series (Beauty, Beast, Blizzard)
 - U of SK cultivars = larger fruit, more uniform, better taste, hardier, minimal Powdery Mildew

U OF SASKATCHEWAN RELEASES

U of S fruit photos by Dr. Bob Bors



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

Varietal Comparisons				
	Target Market	Avg Berry Size (grams)	Yield	Berry Shape
Honeybee	Undetermined (meant as a pollinator)	1.9	Good	Cylindrical
Aurora	Home Garden	1.9	Good	Pointed pear
Boreal Blizzard	Fresh Market / U-pick	2.8 – 3.9	Heavy	Surfboard – round, narrow ends, wide centre
Boreal Beauty	Unknown	2.6 – 3.7	Large	Thick heart or thick oval
Boreal Beast	Processing	1.86 – 2.06	Large	Thick heart / Thick oval

Varietal Comparisons (cont'd)				
	Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments
Russian Varieties	Inferior	No / No	Variable	- Non-uniform ripening - Good pollinators
Tundra	Good	Yes / Yes	Good	
Borealis	Best Tasting	No / Limited	Less than Tundra	
Indigo Gem (9-15)	Good	Yes	Chewy	
Indigo Treat (9-91)	Excellent	Yes		Easier to propagate than 9-92
Indigo Yum (9-92)	More tangy	Yes		Hard to propagate

Varietal Comparisons (cont'd)				
	Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments
Honeybee	Good (somewhat tart)	No	Good	Tall plant; meant as pollinator to BTI
Aurora	Excellent	Maybe / No	Good	Taller plants than Borealis; will pollinize other releases
Boreal Blizzard	Excellent	Yes	Very good	Strong, upright branches; Late flowering / ripening
Boreal Beauty	Excellent	Yes	Average	Blooms & ripens later
Boreal Beast	Excellent; good aroma & aftertaste	Well-suited; even ripening	Excellent	Strong vigour; upright bush; mildew resistant

Tundra

Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Commercial / Mechanical	1.49	Good	Long, flat, bullet / oval-shaped	Early

Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments
Good	Yes / Yes	Good	

Borealis				
Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Home Garden	1.62	Good	Short, flat, boxy	Mid
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Best Tasting	No / Limited	Less than Tundra		

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Indigo Gem				
Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Processing?	1.30	2x other selections	Robust, short oval-shaped	Early
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Good	Yes	Chewy		

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Indigo Treat				
Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Unknown	1.41	Good	Flat cylindrical	Early
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Excellent	Yes		Easier to propagate than 9-92	

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Indigo Yum				
Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Unknown	1.29	Good	Long flat oval-shaped	Early
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
More tangy	Yes		Hard to propagate	

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Aurora				
Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Home Garden	1.9	Good	Pointed pear	Mid
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Excellent	Maybe / No	Good	Taller plants than Borealis; will pollinize other releases	

Canada Alberta Growing Forward




Honeybee				
Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Undetermined (pollinator)	1.9	Good	Cylindrical	Mid
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Good (somewhat tart)	No	Good	Tall plant; meant as pollinator to BTI	

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Boreal Beauty






Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Unknown	2.6 – 3.7	Large	Thick heart or thick oval	Late
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Excellent	Yes	Average	Blooms & ripens later	

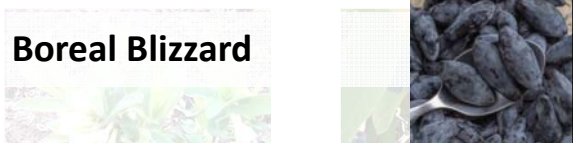
Boreal Beast






Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Processing	1.86 – 2.06	Large	Thick heart / Thick oval	Late
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Excellent; good aroma & aftertaste	Well-suited; even ripening	Excellent	Strong vigour; upright bush; mildew resistant	

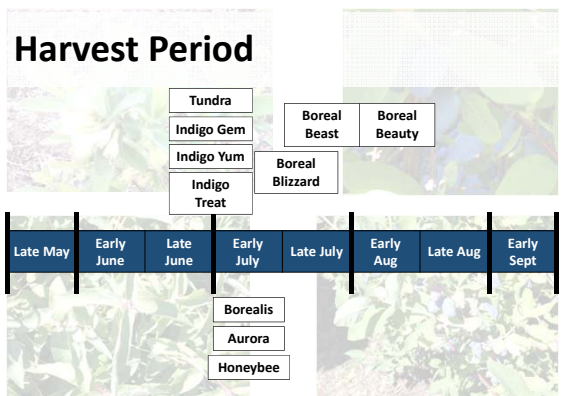
Boreal Blizzard






Target Market	Avg Berry Size (grams)	Yield	Berry Shape	Maturity Period
Fresh Market / U-pick	2.8 – 3.9	Heavy	Surfboard – round, narrow ends, wide centre	Mid/Late
Flavour	Suitability for mech harvest / sorting	Firmness	Other Comments	
Excellent	Yes	Very good	Strong, upright branches; Late flowering / ripening	

Harvest Period



The diagram shows the ripening periods for various blueberry varieties from Late May to Early September. Varieties include Tundra, Indigo Gem, Indigo Yum, Indigo Treat, Boreal Beast, Boreal Beauty, Boreal Blizzard, Borealis, Aurora, and Honeybee.

JAPANESE SELECTIONS (MAXINE THOMPSON'S OREGON PROGRAM)









Yezberry Honey Bunch
(*L. caerulea* 'Kaido')

Yezberry Maxie
(*L. caerulea* 'Kuchi')

Yezberry Solo
(*L. caerulea* 'Kapu')

Photos from Spring Meadow Nurseries

Yezberry Sugar Pie
(*L. caerulea* 'Hoka')

Sugar Mountain Blue
(*L. caerulea* 'Dolce Vita')

Sugar Mountain Eisbär
(*L. caerulea* '54-57')

Sugar Mountain Balalaika
(*L. caerulea* 'Stimul')

Photos from Spring Meadow Nurseries

Canada Alberta Growing Forward

QUESTIONS???

Canada Alberta Growing Forward

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Alberta Ag-Info Centre
310-FARM

HORT SNACKS

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