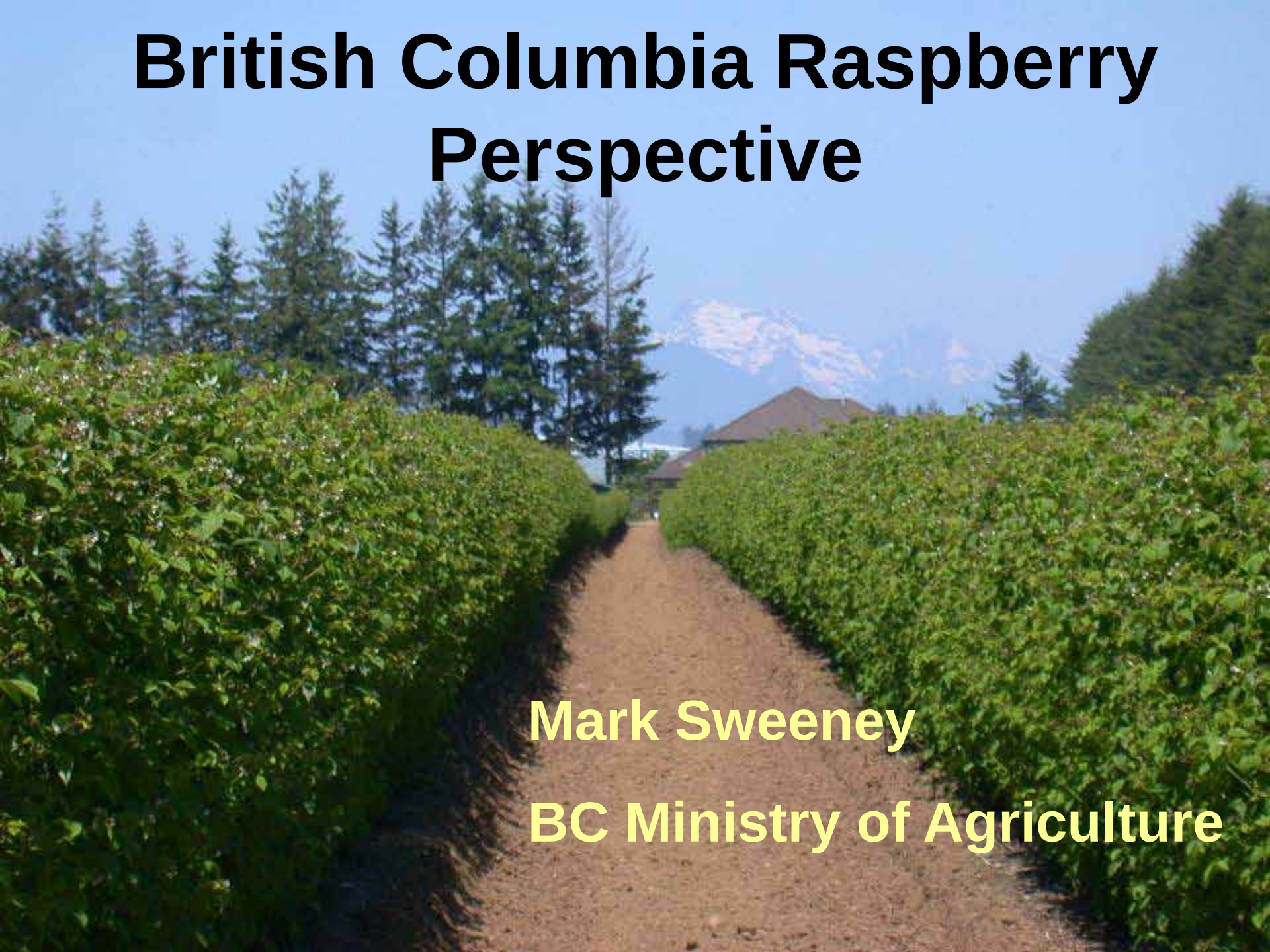
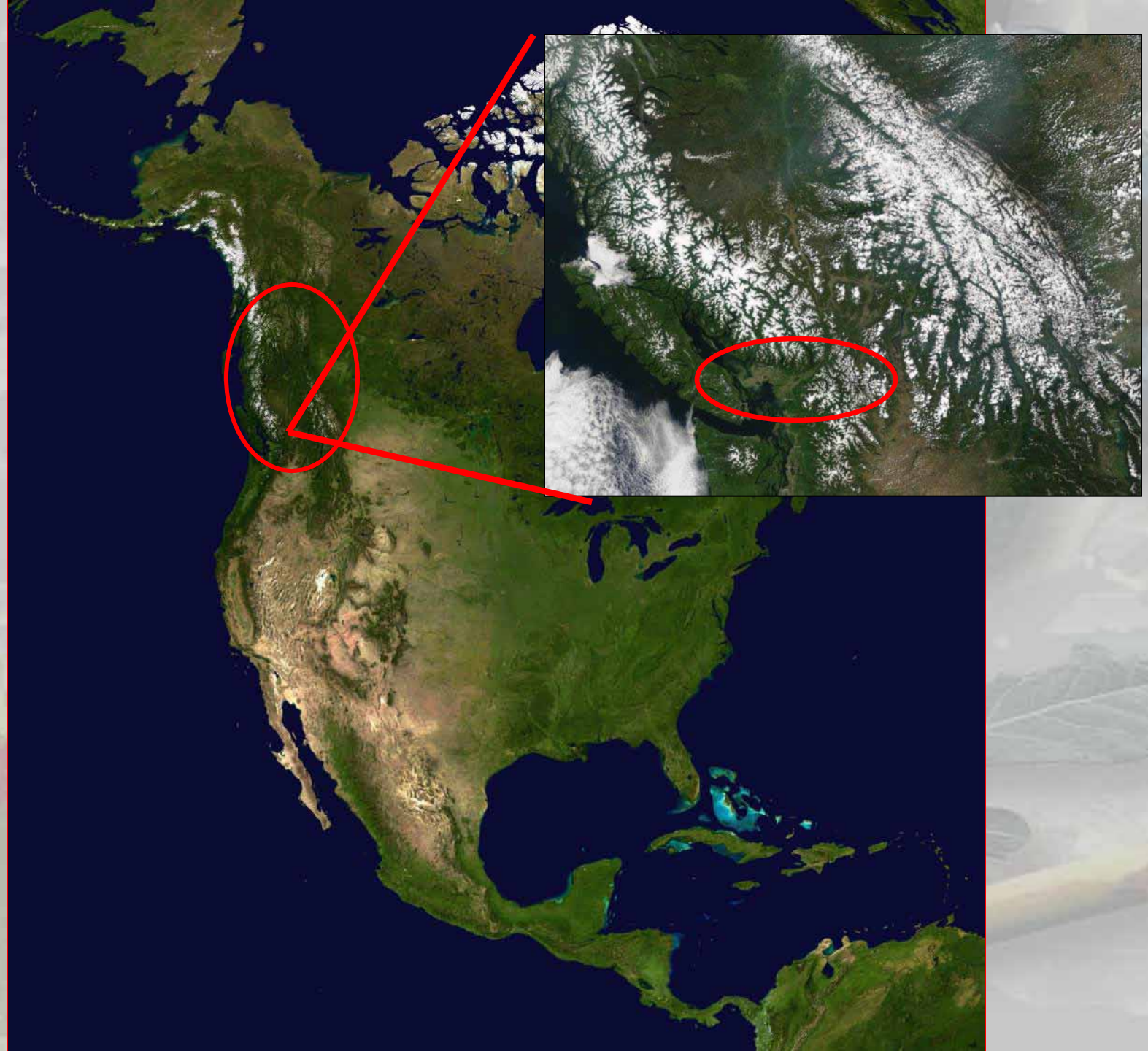
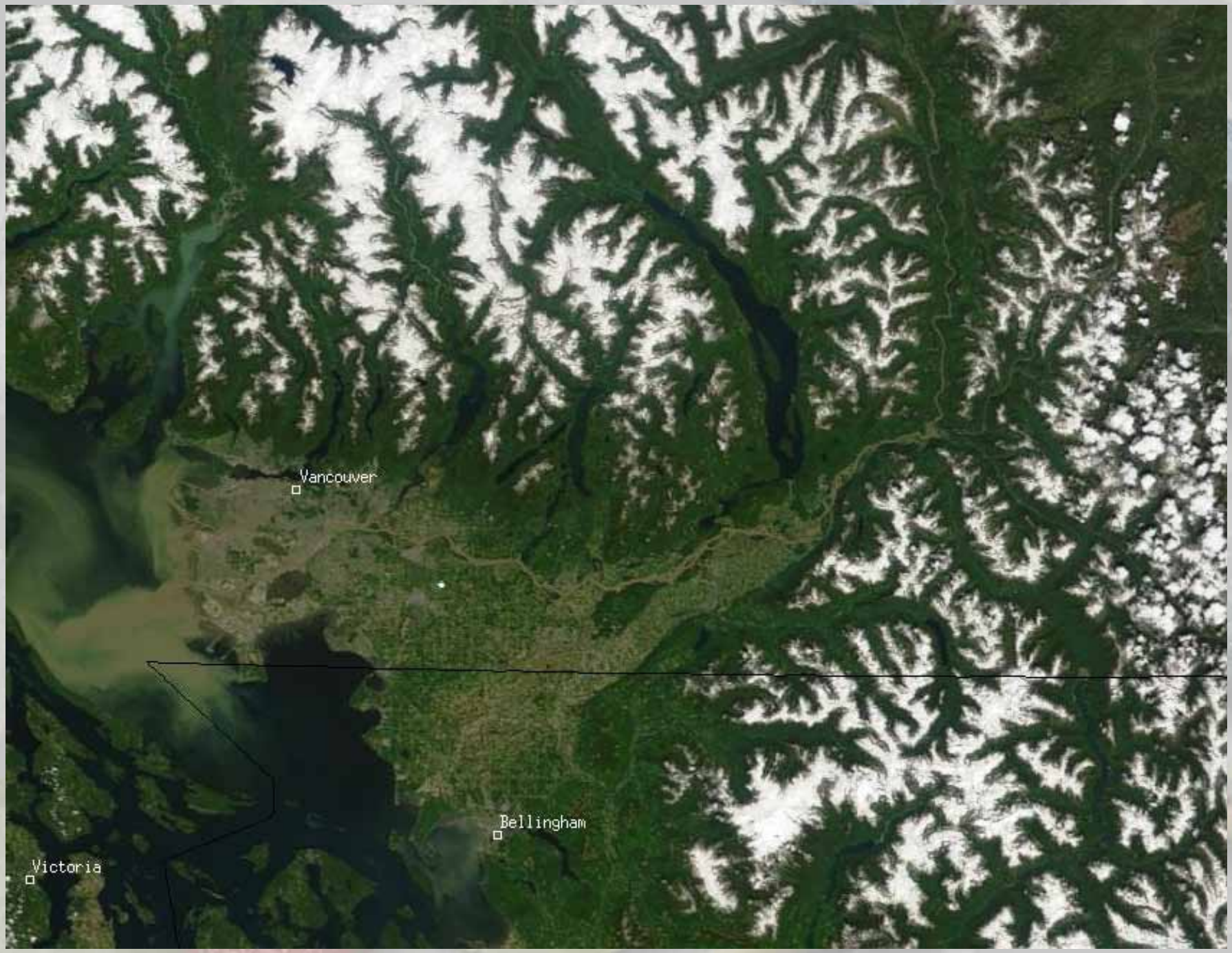
British Columbia Raspberry Perspective



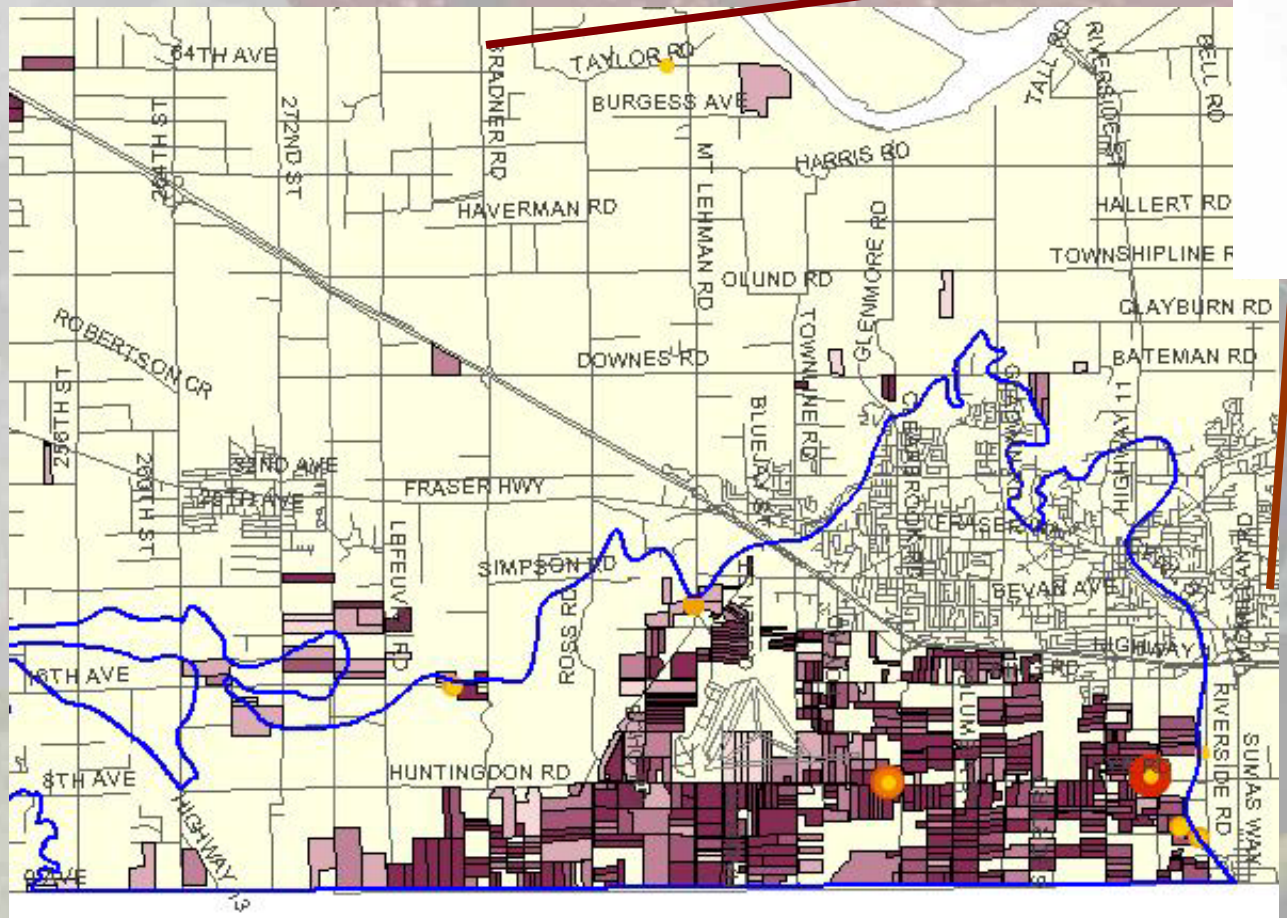
Mark Sweeney

BC Ministry of Agriculture



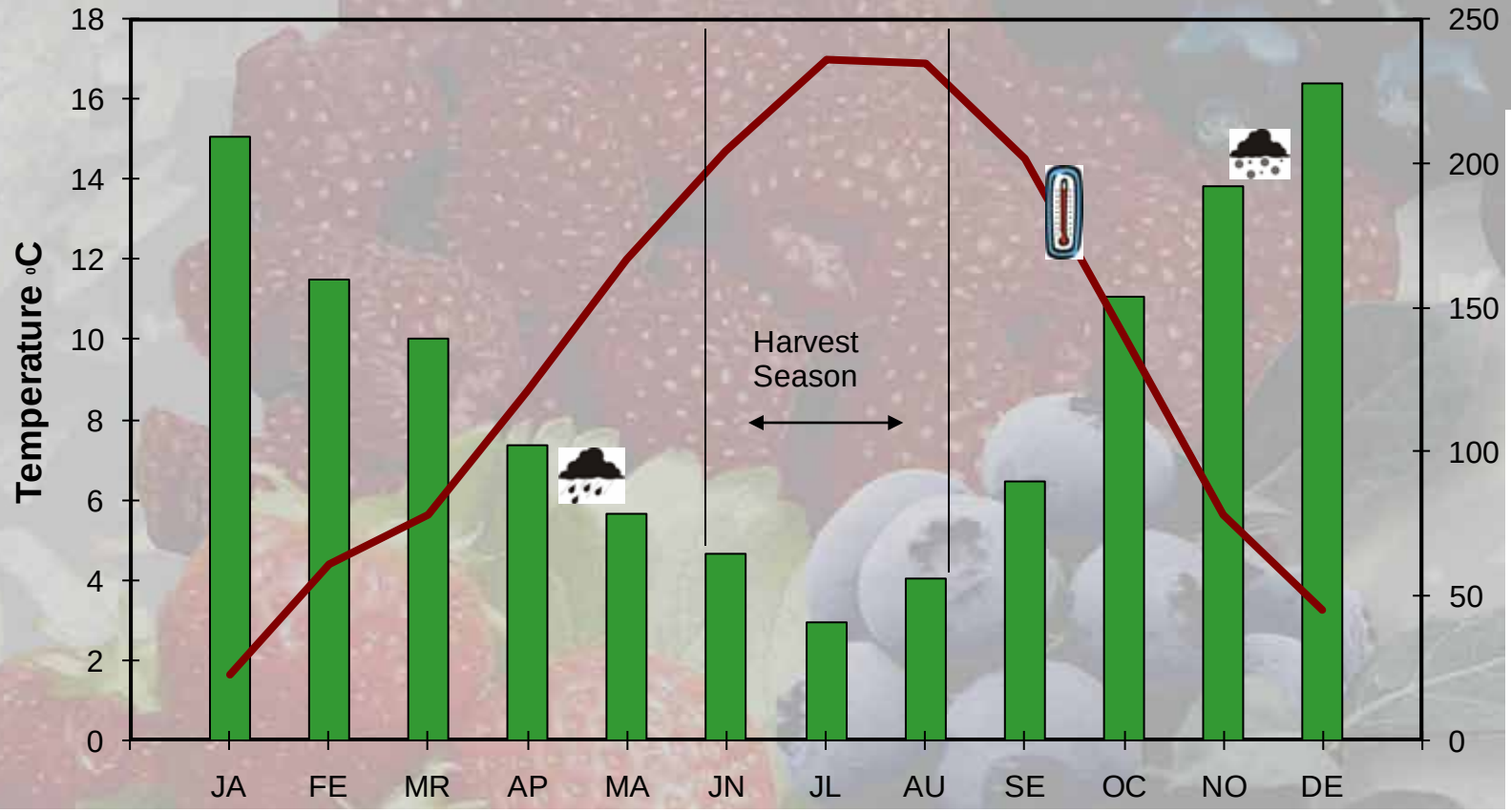

Vancouver
Bellingham
Victoria

Canada


64TH AVE
TAYLOR RD
BURGESS AVE
BRADNER RD
272ND ST
264TH ST
HAVERMAN RD
MT LEHMAN RD
HARRIS RD
TALL RD
RIVERSIDE DR
BELL RD
HALLERT RD
TOWNSHIPLINE R
OLUND RD
GLENMORE RD
CLAYBURN RD
ROBERTSON CR
DOWNES RD
TOWNLINE RD
BLUEJAY ST
BATEMAN RD
256TH ST
32ND AVE
FRASER HWY
LEFEUVRE RD
SIMPSON RD
ROSS RD
BEVAN AVE
HIGHWAY 11
RIVERSIDE RD
SUMAS WAY
16TH AVE
8TH AVE
HUNTINGDON RD
HIGHWAY 1

Shawn Kuchta, PARC

Mean Annual Precipitation and Daily Temperature



Mean Precipitation (mm)

Mean Temperature C

Total Annual Precipitation = 1513 mm

PACIFIC
CO-OPERATIVE
UNION.

1970s/80s – Expansion, Specialization, Mechanization

BC Raspberry Industry Challenges

- **Costs/Competitiveness**
- **Exchange Rate**
- **Land Issues**
- **Pests and Diseases**
- **Environment**
- **Demand/Consumption**

US Dollar to Canadian Dollar Exchange Rate

Land Costs

11.9 Acres with 4000 + sqft Home *REDUCED*

Abbotsford, BC **$1,495,000.**

Enhanced Feature Sheet | More Photos |

9.68 Acre Blueberry Farm

Surrey, BC **$1,500,000.**

Enhanced Feature Sheet | More Photos |

29.14 Acre Blueberry

Surrey, BC **$3,250,000.**

Enhanced Feature Sheet | More Photos |

32.8 Acre Blueberry Farm

Surrey, BC **$3,400,000.**

Enhanced Feature Sheet | More Photos |

Pests and Diseases

Phytophthora Root Rot

New Virus Complexes

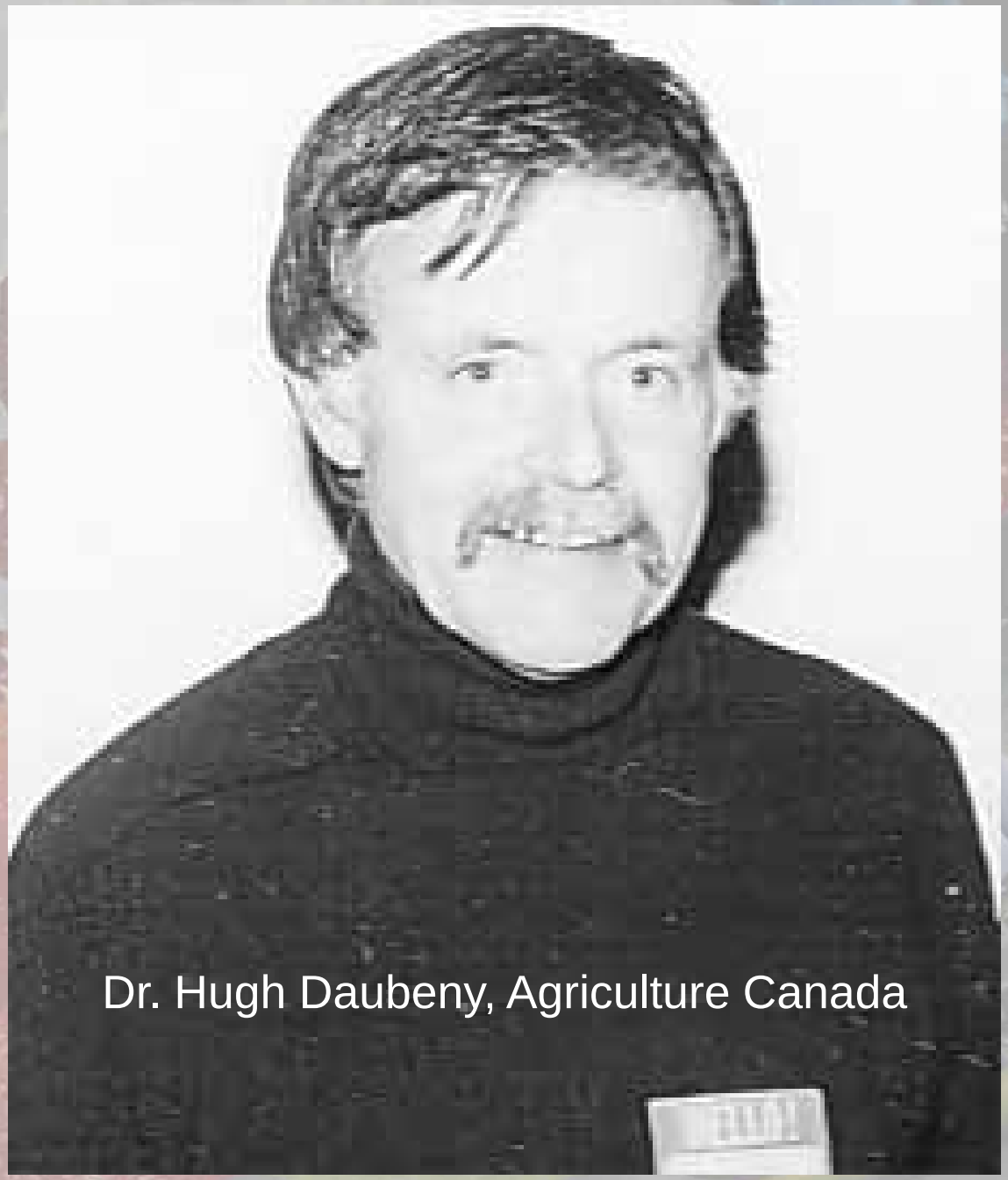
Spotted Wing Drosophila (SWD)

Sheila Fitzpatrick, PARC

Environmental Issues

Research

Agassiz Research Station circa 1950



Dr. Hugh Daubeny, Agriculture Canada

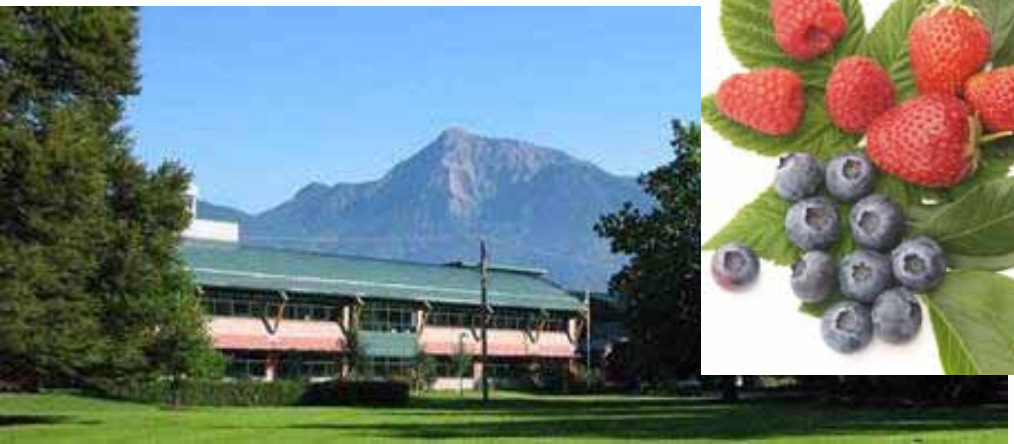
Tulameen

Agriculture and Agri-Food Canada | Agriculture et Agroalimentaire Canada

BC Breeding Program

Pacific Agri-Food Research Centre
Agassiz, BC

Chaim Kempler, Michael Dossett, Tom Forge, Tissa Kannangara, Brian Harding and Georgia Kliever



Canada

Program Objectives

- Floricane varieties
- Processing and fresh markets
- Machine harvestable
- Fruit Quality
- Winter hardiness
- Pest and Disease Resistance
  - Phytophthora Root Rot
  - Raspberry aphid (virus vector)
  - RBDV
  - Fruit Rot

Chemainus (BC89-33-84)

(Algonquin x Chilliwack) x Tulameen

- **Processing and Fresh**
- **Machine harvestable**
- **Suited for IQF**
- **Dark, glossy firm fruit**
- **Mid to late season**
- **Low fruit rot**
- **Vigourous plant**
- **Suscept to root rot, cane disease**

Rudi (BC 90-4-23)

Rudi (BC90-4-23)

- week earlier than Meeker
- fresh and process
- high yields
- large, flavourful, firm fruit
- machine harvestable
- suscep to RBDV, but slow to infect
- aphid resistance
- winter hardy?

BC92-9-15 (Malahat x BC86-41-15)

BC92-9-15 (Malahat x BC86-41-15)

- matures early, 1 week later than Malahat
- fresh and process
- machine harvestable
- **root rot resistant**
- attractive large, glossy fruit
- resistant to aphids
- productive, high fruit quality
- susceptible to spur blight and RBDV

GOOD AGRICULTURAL PRACTICES

FOR BC BERRY GROWERS

WATER QUALITY

- Water quality must be suitable for intended agricultural use
- Test water for E. coli and/or fecal coliforms

Irrigation

- Water used for overhead irrigation must meet BC Water Quality Guidelines
- Drip irrigation is preferred if using surface water

Other

- Use potable water for:
  - Spray mixtures – especially for spraying after fruit has formed
  - Washing harvesters, picking containers & other equipment
  - Hand washing

MANURE

- Use aged (stored at least 3 months) or composted manure
- Apply at rates which match the crop's nutrient needs

Storage

- Cover field-stored manure from October 1st to April 1st
- Store at least 30m from any well or watercourse
- Store away from harvesting equipment and picking containers

Spreading

- Apply between mid-February & mid-April
  - mid-February is preferred, environmental conditions permitting
- Minimize manure contact with canes, wires or poles

PESTICIDE APPLICATION

- Only use pesticides registered for the crop
- Apply pesticides at the right time under the right conditions
- Follow rates & pre-harvest interval specified on the label

Storage

- Store pesticides in a properly maintained, securely locked, well-ventilated facility posted with warning signs

Sprayer

- Calibrate and maintain to operate correctly
- Fill & clean in a location that does not contaminate berries, picking containers, harvesters, other equipment or water

WORKER HYGIENE

- Provide proper sanitary facilities & proper hygiene training for all workers

Hygiene and Sanitary Facilities

- Must be adequate in number, relative to field crew
- Must be conveniently located in the field
- Toilet(s) must be regularly serviced and cleaned
- Hand washing unit(s) must include clean water, liquid soap, disposable paper towels & garbage bin

Training

- Designate an individual to train workers & monitor practices
  - use signs and training materials

GOOD PICKING PRACTICES

- Protect berries from contamination

Equipment sanitation

- Wash harvesters and picking containers regularly and store to prevent contamination

Training

- Ensure pickers know to:
  - Pick into clean containers
  - NOT wear jewellery or keep necessary jewellery covered
  - Cover cuts or wounds
  - Report illnesses

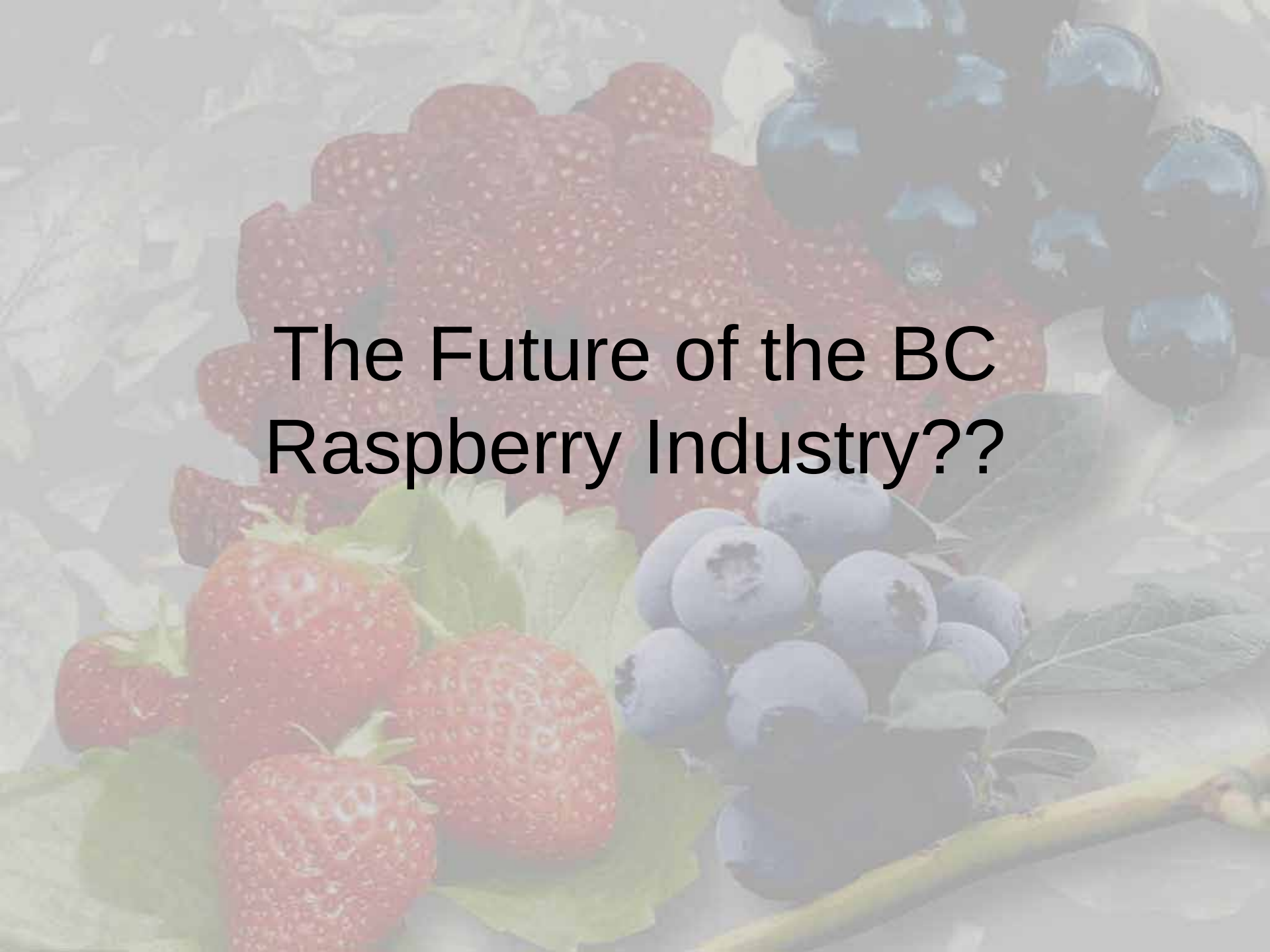
BC Blueberries

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada

Investment Agriculture Foundation of British Columbia

Ministry of Agriculture, Food and Fisheries

raspberries



The Future of the BC Raspberry Industry??

Enjoy Your Stay in BC!!