

# **Tunnel-growing systems for raspberries -Development of germplasm with two-spotted spider mite resistance, and adaptation of reflective mulches for increased yield – Report December 2013**

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## **Abstract:**

A collection of raspberry genotypes has been made so that greenhouse tests for spider mite resistance can begin in spring.

We had all the cultivars growing to do the trials and had to stop as funding ran out.

We have an application submitted in June 2013 to the Canadian Federal Growing Forward 2 Agricultural Innovation Program. So far we have heard nothing.

Also, we have run into unexpected issues with funding from the industry. Therefore, if we cannot find funding by the end of 2014, I intend to reimburse the grant.

## **Objectives and timelines**

### 1. Objectives

1. To identify raspberry cultivars and genotypes, and develop genotypes resistant to two spotted spider mite
2. To ascertain the effect of reflective mulches on raspberries in protective cultivation

### 2. Planned Activities for 2012

- a. Collect and maintain germplasm
- b. Conduct spider mite assays
- c. Determine the resistant vs. susceptible genotypes, select parents, make crosses, and collect seeds
- d. Plant cultivars at the New Liskeard and Cedar Springs Research Stations.
- e. Assay spider mite populations of raspberries field trials.

### 3. Activities:

- a. Collect and maintain germplasm

A collection of 41 raspberry cultivars from throughout North America and 11 unnamed selections has been made (Table 1). These were propagated from root cuttings in January 2013. Trays of cuttings were maintained during the 2013 growing season and are now in cold storage.

- b. All other activities were not started

Table 1. Collection of Red Raspberry Cultivars made for Spider Mite tests in 2013

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Algonquin	Comet	Joan Squire	Octavia	SK Red Mammoth
Autumn Bliss	Encore	Josephine	Pathfinder	Taylor
Autumn Britten	Glen Ample	K81-6	Polka	Titan
Boyne	Heritage	Killarney	Polana	Tula Magic
Canby	Himbo Top	Latham	Prelude	Tulameen
Cascade Delight	Honeyqueen	Malahat	Qualicum	11 Unnamed Selections
Cascade Gold	Jaclyn	Meeker	Reveille	
Caroline	Joan Irene	Nantahala	Royalty	
Chemainus	Joan J	Nova	SK Red Bounty	

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