

Tunnel-growing systems for raspberries -Development of germplasm with two-spotted spider mite resistance, and adaptation of reflective mulches for increased yield. – Report December 2012

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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 2012. Additional funding from other sources has been applied for, and hopefully we can start field trials in 2013.

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 will be propagated from root cuttings in January 2013 and used for spider mite tests when plants are 10cm tall.
- b. All other activities were not started

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

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	Jaelyn	Meeker	Reveille	
Caroline	Joan Irene	Nantahala	Royalty	
Chemainus	Joan J	Nova	SK Red Bounty	