



Managing Extreme Heat with Reflective Tarps in the Blueberry Industry

Fraser Valley Adaptation Strategies Implementation

Request for Expressions of Interest

Project Timeline

March 25, 2020 – March 15, 2021

Project Background

This project evolved out of strategies and actions in the 2015 [Fraser Valley Adaptation Strategy](#) (strategy 5.1, & actions 5.1A & 5.1B) and in the 2018 [Fraser Valley Adaptation Strategies Update](#) (priority action #7). This plan and update identified suitable strategies and actions to assist agricultural with adapting to the potential impacts of climate change. Implementation is led through the Fraser Valley Agricultural Adaptation Working Group.

A 2019 study – [State of Practices and Technologies for Managing Extreme Heat Impacts](#) - reviewed heat management practices and technologies currently employed by the Fraser Valley blueberry industry, as well as those utilized in other jurisdictions, and identified those with potential for adoption or expanded uptake¹. Use of reflective tarps was identified as a relatively low-cost option to reduce post-harvest negative impacts of heat on berry quality.

Project Objectives

- To assess packer-processor and producer interest in – and barriers to – adoption of reflective tarps
- To develop, implement and evaluate a demonstration of the use of reflective tarps
- To identify challenges and opportunities in the use of reflective tarps
- To share results of the demonstration with producers through knowledge transfer activities

Project Oversight

The project will be overseen by a committee comprised of members from the Fraser Valley Agricultural Adaptation Working Group and other partners/stakeholders from the blueberry industry. The coordinator will be expected to report regularly to this committee and maintain communication throughout the duration of the project. The committee will also take an active role in providing direction and guidance to the coordinator.

Project Description

This project will encourage increased adoption of reflective tarps in the Fraser Valley's blueberry industry through demonstration and knowledge transfer. A survey of packer-processors² and

² Preliminary outreach to packer-processors has confirmed an interest in project participation.



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producers will be conducted to determine current barriers to adoption. Outreach will also be conducted with current reflective tarp users (e.g. BC cherry growers) and others with experience in their use (e.g. researchers and manufacturers/distributors). This will help to ensure that issues and potential solutions are identified in advance of the demonstration.

The primary project activities will include the design and implementation of a demonstration project that will take place during the summer of 2020. A small number of packer-processors will assist with the uptake of the use of reflective tarps with a select set of willing growers. The specifics of the demonstration will be determined in collaboration with participating packer-processors, producers, and other key partners, but will likely include the distribution of reflective tarps to a group of growers for use throughout the harvest. The demonstration will help to identify any potential issues, demonstrate different methods of application, as well as to show the value of the tarps to a broader group of growers.

An evaluation process will occur at the end of the season to document and summarize any identified issues or challenges with the use of the tarps. This evaluation will document the experiences of both the packer processors and growers and will help to better communicate the value and/or to address identified challenges.

Following this demonstration and evaluation, a set of knowledge transfer resources will be developed to more broadly communicate the information about reflective tarps. This may include the creation of 1-2 concise fact sheets to summarize the results of previous applied research, along with any practical learning from the demonstration. These resources will be distributed through industry events including the Pacific Agriculture Show (2021) and may be combined with a brief presentation of demonstration outcomes.

Activities

Survey and outreach [April 2020]

- Conduct a survey of packer-processors and blueberry producers to determine current barriers and concerns related to reflective tarp use
- Outreach to current tarp users (e.g. BC cherry producers) to determine current practices and challenges and transferability to the Fraser Valley blueberry sector
 - Interview 3-5 current users of reflective tarps
- Outreach to industry specialists and reflective tarp manufacturers/distributors to determine possible application of tarps
- Submit survey and outreach summary to oversight committee

Demonstration planning and development [April - May 2020]

- Engage industry partners for demonstration
 - Secure packer-processor (2-3) and producer cooperators (12-20) to participate in the demonstration
 - Secure tarp manufacturer participation and material availability
- Develop demonstration plan, considering:
 - Number of packer-processors and producers involved



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- Physical/logistical application and use of reflective tarps (e.g. covers for lugs, pallets, bins, trucks) and material(s) required
- Ease and efficiency of use
- Potential food safety concerns/issues
- Submit draft and final demonstration plan to oversight committee

Implementation and evaluation [June – October 2020]

- Coordination and implementation of demonstration
 - Developing system of distribution of reflective tarps
 - including initial education and training for participating producers and packer-processors
 - Support of project partners in maintaining use of tarps throughout growing season
- Documentation and evaluation of reflective tarp use
 - Submit evaluation summary to oversight committee

Knowledge transfer [November 2020 – March 2021]

- Develop resources that highlight/promote the potential for use of reflective tarps that includes:
 - Examples/results/media from demonstration/pilot component
 - Economic information
 - Data/results from research
- Submit knowledge transfer plan to oversight committee
- Resources could include:
 - Factsheets
 - Multimedia
 - Presentations
- Engage berry industry and promote materials at industry events, including the Pacific Agriculture Show

Project Deliverables

- Survey and consultation summary
- Demonstration implementation plan
- Project coordination (logistics, oversight and troubleshooting)
- Evaluation summary
- Knowledge transfer materials

Summary of preferred background, expertise & experience

- Strong interpersonal skills that enable positive and productive interaction and coordination between a range of project stakeholders



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- Experience working with agricultural producers, with a preference for experience with the Fraser Valley blueberry industry
- Experience with project coordination and agricultural research or demonstration
- Experience developing knowledge transfer materials and sharing information with agricultural producers
- Ability to work both collaboratively (with project team) and independently
- Ability to manage and coordinate logistics

Contract Amount

\$25,500 in fees (inclusive of all applicable taxes and contractor expenses)

Note: \$4,500 of the above fees are earmarked for the reflective tarp material costs and other expenses.

Key Project Partners

BC Blueberry Council
BC Ministry of Agriculture
Agriculture and Agri-Food Canada
Local Governments

Instruction for Application

Please provide your cover letter, resume and 2 professional references. This should be submitted as one complete electronic application, in PDF format to:

FraserValley@bcagclimateaction.ca

Enquires regarding this posting should also be directed to the above mail address. Applications must be received no later than Wednesday, March 25 2020, 5pm PST.