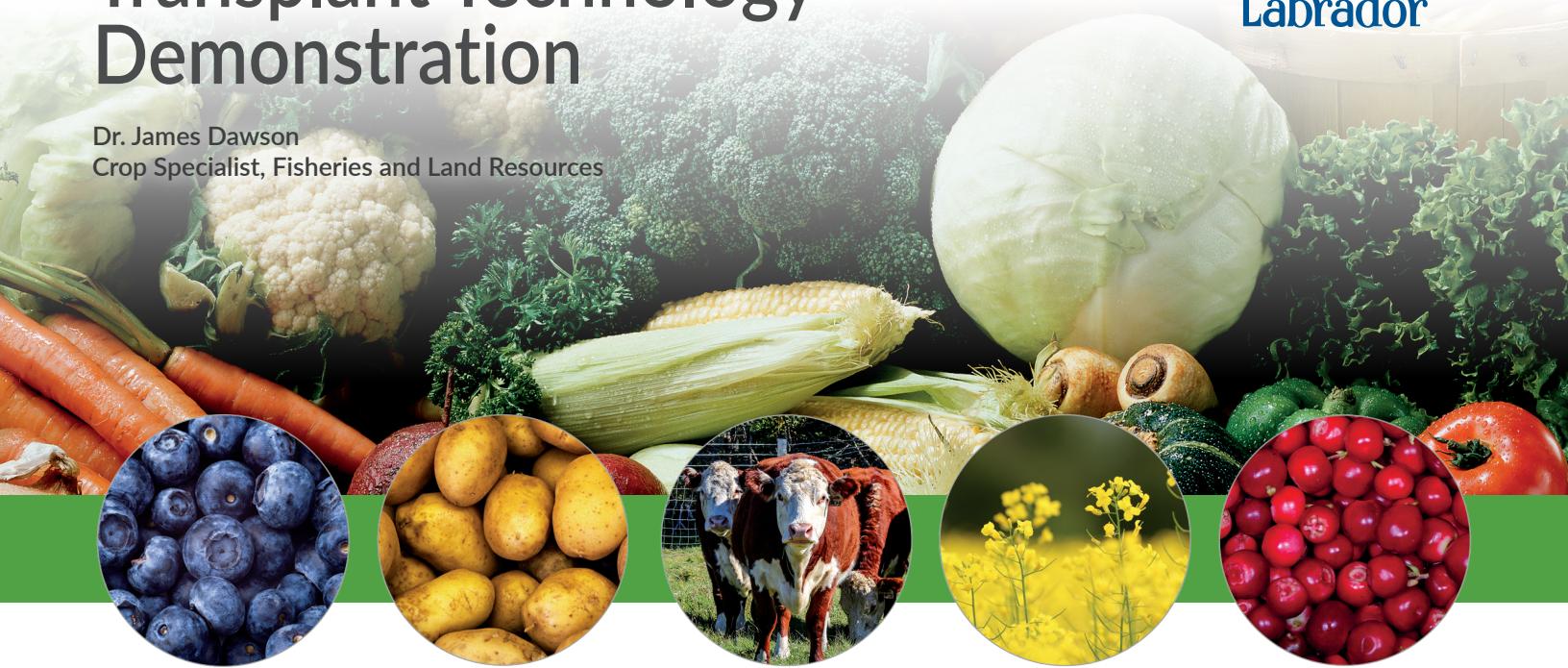


Transplant Technology Demonstration

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Background

Traditionally the diversity of vegetable crops grown in Newfoundland and Labrador has been limited largely due to the short cool growing seasons. The demand for crops not traditionally grown in the province has increased greatly in recent years and warm season crops such as tomato, pepper, and cucumber are highly sought after with the vast majorities being imported. The use of transplants combined with new cropping tools and technologies have been demonstrated in other jurisdictions to increase the range and yield of fruit and vegetable crops. Equipment such bed shapers and low tunnel machines can be used to sufficiently increase heat units to provide new crop options that were not possible in the province except in larger greenhouse systems.

Technical Details

The Government of Newfoundland Labrador will demonstrate several technologies that will allow producers to increase crop diversity and increase yield per unit area. The newly implemented Provincial Vegetable Transplant Program will demonstrate a series of field transplant equipment in the field to aid producers with best management practices for the production of vegetables from transplants. A bed shaper and mulch layer machine will be used to create a four-inch raised bed in the field while placing black plastic mulch and a drip line for irrigation that will create a condition with elevated soil temperatures, better water drainage and on-demand irrigation. A second unit will puncture the plastic and fill it with water while an operator seated to the back of the unit

places the transplant in the newly formed hole. Finally a low tunnel machine will be used to place white perforated plastic over the transplants.

Agriculture Industry Benefits

Diversification can expand economic opportunities for vegetable farmers while providing new healthful produce options as consumer demands are changing. This series of field activities should provide the heat units, irrigation and fertigation necessary for field production of warm season crops in the province. In addition, these technologies can be used to lengthen the growing season to allow for double cropping of cool short season crops such as leafy greens, beets and radish, thus increasing production and farm revenue.

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