

Ontario Tree Fruit Innovation and Technology Roadmap

Battery Operated Tying Tools

Evaluating New Technologies

	Feasibility and cost	Implement	Labour Reduced	Changes in production	Training for staff	Impact on risk of COVID-19 Transmission
	low, medium, high	easy, medium, challenging	% estimate	easy, medium, hard	none, medium, high	none, low, medium, high
Battery-operated tying tools (for training)	low	easy	20-40	easy	medium	medium

Current Status - Training trees on trellises requires tying tools, tape, clips, etc. to hold and place trunks and limbs. Most growers train the trees using platforms as the tree grows to the top of the trellis.

Feasibility of Implementation - The battery-operated tying gun is available for training trees to trellis. The initial cost is expensive but provides the ability to cover large areas quickly.

Impact on Labour – Tying tree trunks and branches from a platform with battery operated equipment increases efficiencies and the payback period is estimated to be 1 to 2 years.

COVID-19 Mitigation Risk - Battery-operated tying tools may increase labour productivity but may not significantly reduce overall labour requirements and would not have a significant impact on lowering the risk of exposure or transmission among workers.

Need for Change, Research and Training - Implementation would require training and a specialized set of skills for the operator of this equipment. The operator using the battery-operated tying gun needs a fair amount of training and skill to operate and carry out routine adjustments.