

Ontario Tree Fruit Innovation and Technology Roadmap

Automatic Bin Dumpers

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
Automatic Bin Dumpers	high	medium	50	medium	medium	high

Current Status - New innovative automatic bin dumper systems involve robotics for continuous feeding into the line. Both wet and dry automatic systems are available.

Currently most tender fruit growers are using 11-quart wax baskets and hand dumping onto the line. Some growers are using individual container dumping systems for plastic totes that are palletized in field manually, loaded on tractors, brought into facility, and cooled and manually unloaded and tipped into the pack-line system. This has a positive benefit for food safety since the fruit is only touched once by the people harvesting.

Feasibility of Implementation - Individual container dumping technology is easy to implement for plastic totes since it is the same practice as waxed 11-quart baskets, but the cost would be higher initially for the plastic totes. Both wet and dry automatic dumping systems are expensive to purchase but would be easy to implement.

Impact on Labour - automatic dumping systems would reduce labour by automating manual bin dumping. Individual container dumping would have a minor impact on labour for plastic totes since it is the same practice as waxed 11-quart baskets.

COVID-19 Mitigation Risk - Since labour is reduced by new automated technology, the risk of exposure would be reduced minor. However, Individual container dumping would have a minor impact on the current risk of exposure.

Need for Change, Research and Training – Implementation would be easy for both wet and dry systems with minimal skill training requirements.