Tart Cherry Over The Row Harvest

NWHRC, Traverse City, MI

On Wednesday, July 29 we will be harvesting tart cherries planted in a High Density block research trial at the Northwest Michigan Horticulture Research Center, near Traverse City. The plot was established in 2011 with the support of the GREEEN project and the Michigan Cherry Producers. The planting has 6 varieties of sour cherry planted 5 X 13 feet. We are experimenting with treatments to maintain trees in a compact canopy to accommodate an over the row harvester used normally to harvest berry crops. This work began in 2008 with the support of the Michigan Cherry Producers to determine the feasibility of this approach to growing and producing sour cherries. The traditional approach maintains trees at greater distances (15-20 feet apart) using trunk shakers and catch frame machinery. We are inviting members of the northern tart cherry industry and affiliates to view harvesting at the research station (6686 S CENTER HWY) at 5:30 pm on July 29.

With the support of the Michigan Tree Fruit Commission, Michigan State Hort Society and the International Fruit Tree Association, we will be harvesting the research plot on July 29 using a Littau ORXL (2013 model) berry harvester (www.littauharvester.com/products.php). Previous work with the Twin-Tower Rotating-Tine harvester mechanism has been found to be efficient and effective in fruit removal of cherries. We tested the Littau Harvester, sold and rented through Spring Brook Supply, Holland, MI at Oxley Farms near Lawton, MI on July 13 and 14. The machine removed fruit at a very high rate of efficiency with minimal canopy damage. Since 2012, Oxley Farms have cooperated with us in a project to study horticultural approaches to restricting and maintaining a compact canopy, small enough to allow a berry harvester to successfully remove fruit. Oxley Farms allowed us to establish treatments in two rows amounting to over 300 trees. The company purchased a used Korvan 9000, Twin-Tower Rotating-Tine harvester (Oxbo 9000) in 2012 with intent to harvest the planting. We successfully harvested fruit from the planting in 2013. The crop was severely reduced due to spring frosts in 2014. We were successful in developing a protocol for harvesting each group of trees with the machine within treatment parameters while retaining treatment integrity. We were successful in 2015 using the Littau Harvester and will deploy these protocols with the harvesting at the NWHRC on July 29. .



Dr. Ron Perry, Professor of Horticulture, MSU, Project PI

Dr. Nikki Rothwell, NWHRC Director and Extension Educator, MSU, team cooperator