

USING AN EVAPOTRASPIRATION MODEL TO ESTIMATE WATER REQUIREMENTS FOR A CRANBERRY CROP

Brian Mauza¹ and Neal Hamilton²

¹Ocean Spray of Canada, Ltd., 5400 No. 6 Road, Richmond, British Columbia, V6V 1T1, ²Iron River Farms Ltd., 3898 York Road, Campbell River, British Columbia, V9H 1B2

In 2009 the grower installed an evapotranspiration module on an Argus irrigation control system on their farm. The system monitors weather, pump pressures, crop temperatures and schedules irrigations including frost protection.

The evapotranspiration model calculates a reference evapotranspiration rate and accumulates it until sufficient evapotranspiration has occurred to trigger an irrigation event. In the first year of operation we want to compare standard grower driven irrigation schedules with the system generated irrigation requirements to make sure the model and the irrigation decisions are correctly calibrated for the cranberry crop and crop conditions.