Helping blueberry farmers save water

Dr Sophie Parks, New South Wales Department of Primary Industries

How much water does a blueberry plant need?

New Clean Coastal Catchments research will create a model to answer this question and help blueberry growers optimise water use.

The research conducted in collaboration with plant physiologist, Dr Michael Forster from Griffith University, will look closely at how much water blueberry plants take up under different conditions.

Clean Coastal Catchments researcher, Dr Sophie Parks said the water use model will estimate the irrigation needs of blueberry crops as the plants grow and weather conditions change.

"Although blueberries in our experiments currently use 4 to 10 litres of water per day, exactly how much they need in varying production settings will depend on their size, age, growth stage and other seasonal or environmental conditions."

"By measuring sap flow within the plant at different stages of growth and in different weather conditions, we will be able to estimate how much water a blueberry crop uses," she said.

"Once validated, the blueberry water model will be used to develop an interactive irrigation calculator for growers."

Dr Parks said the water use model will help save on water and enable an appropriate amount of fertiliser to be applied, a win for both growers and the environment alike.

"This new knowledge and calculation tool will help blueberry growers to irrigate their crops efficiently, and in turn help to reduce potential nutrient runoff which can improve water quality in coastal creeks and rivers."

The Clean Coastal Catchments project works with growers to keep sediment and nutrients on farms and out of coastal waterways while supporting profitable and sustainable agriculture.



DPI Technical Assistant, Leanne Davis measuring canopy area of Blueberry plants using a leaf area index meter.Photo credit: Sophie Parks

To find out more about the project visit www.marine.nsw.gov.au/projects/clean-coastal-catchments-research

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