

The effect of water and nitrogen on almond production

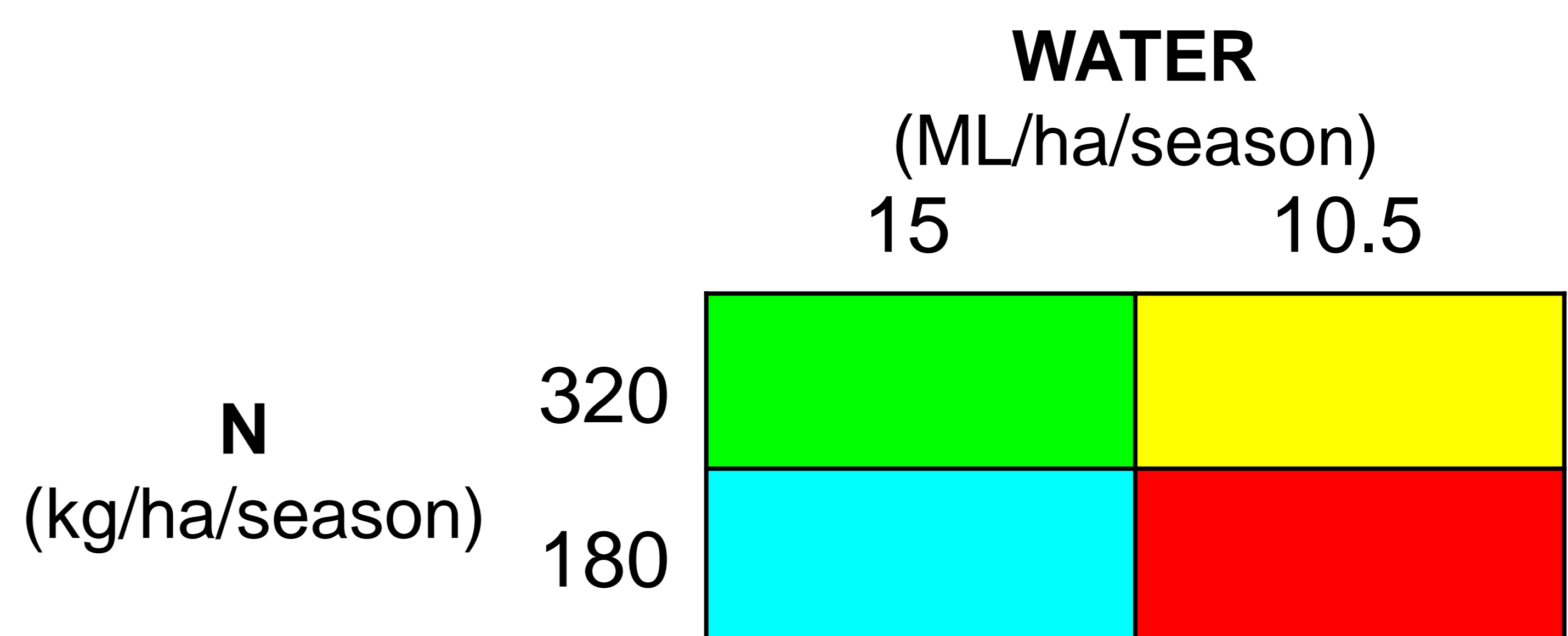
Zelmari Coetzee, Cathy Taylor and Michael Treeby



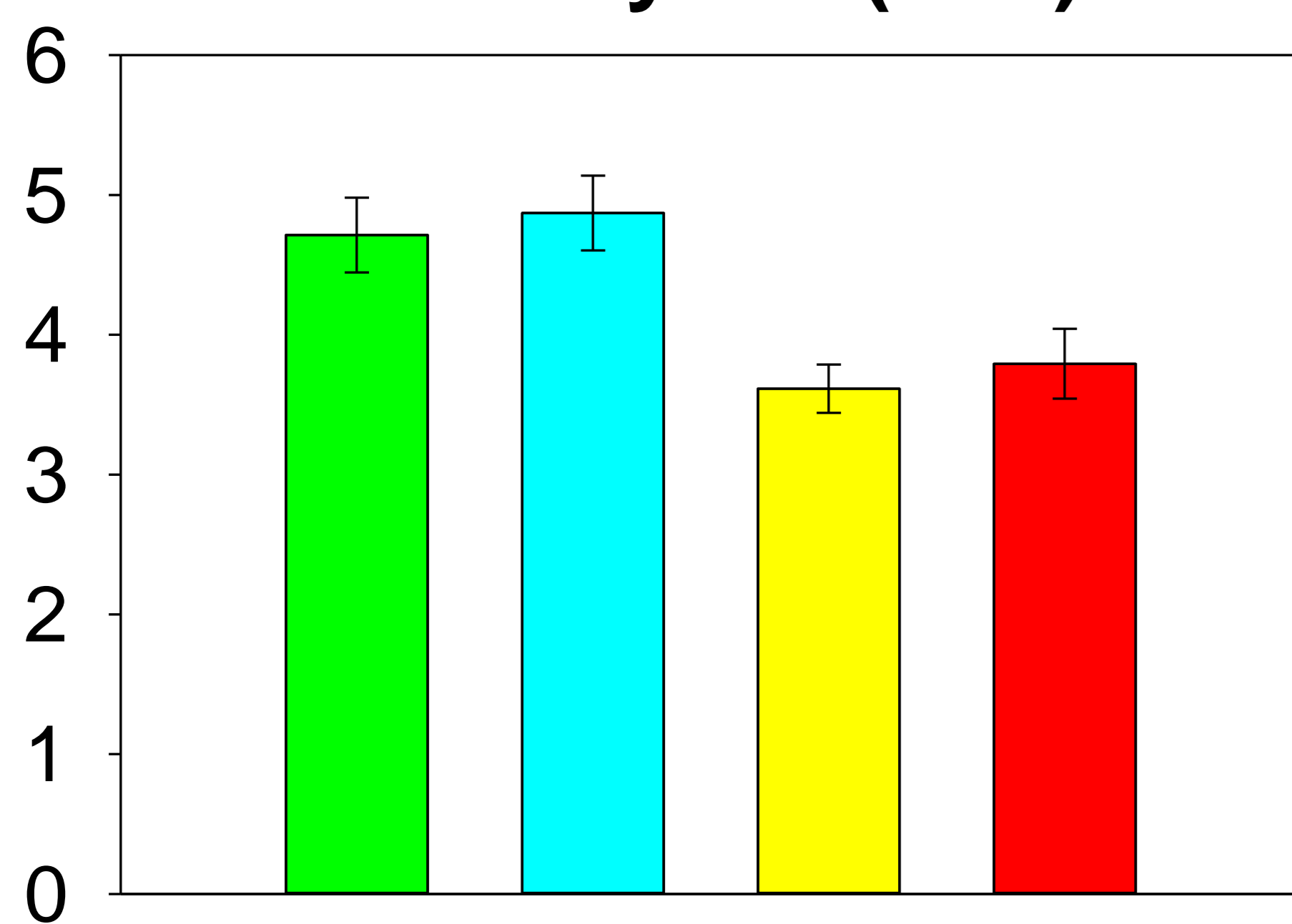
High and stable yields across seasons are a priority in any agricultural industry to ensure profitability. As for most crops, water and nitrogen (N) management are important in achieving this aim in almonds.

To better understand the roles that irrigation and nitrogen fertiliser supply play in almond production, a trial was conducted on a Nonpareil orchard in north-west Victoria.

Four treatment combinations were applied.

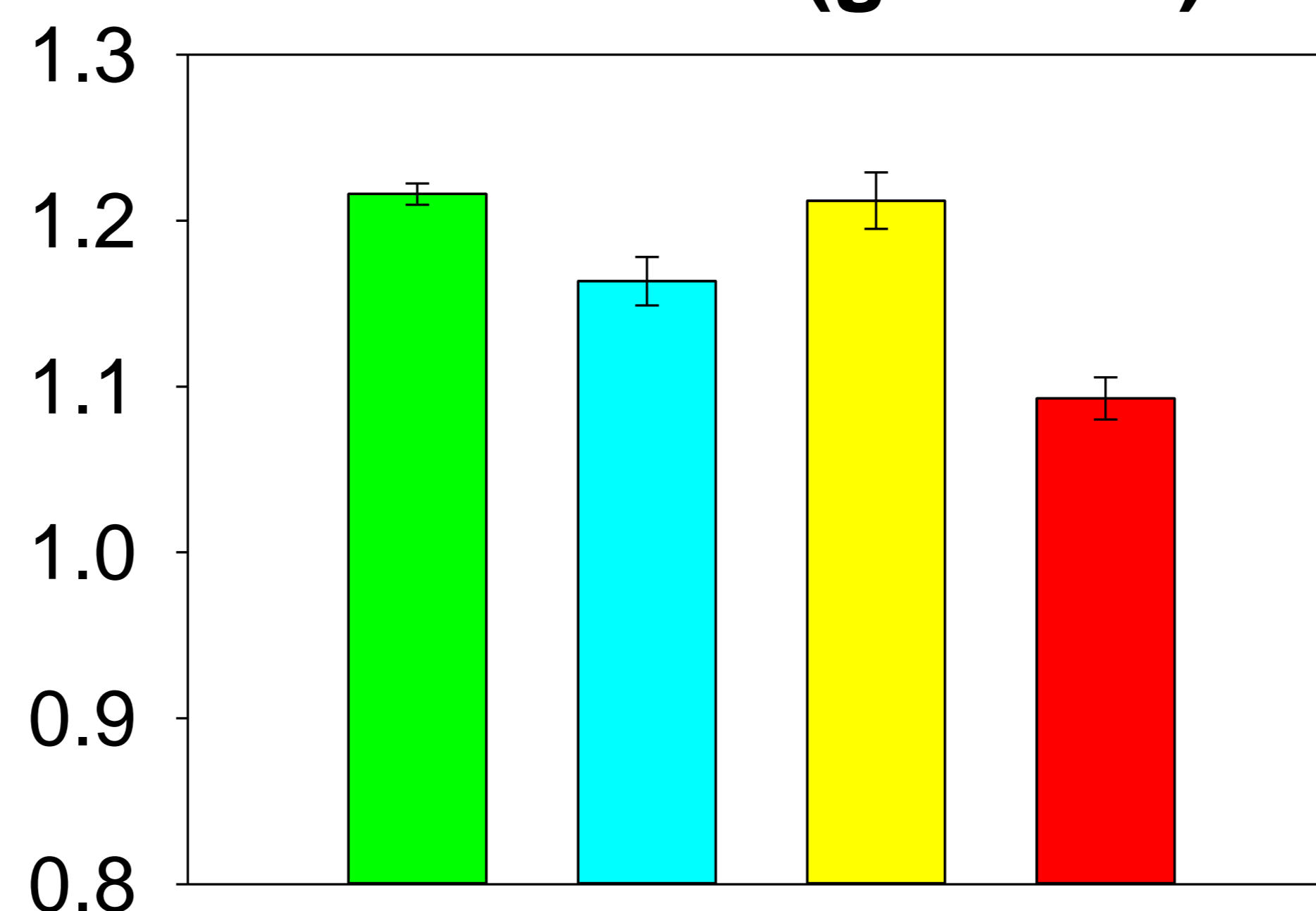


Kernel yield (t/ha)



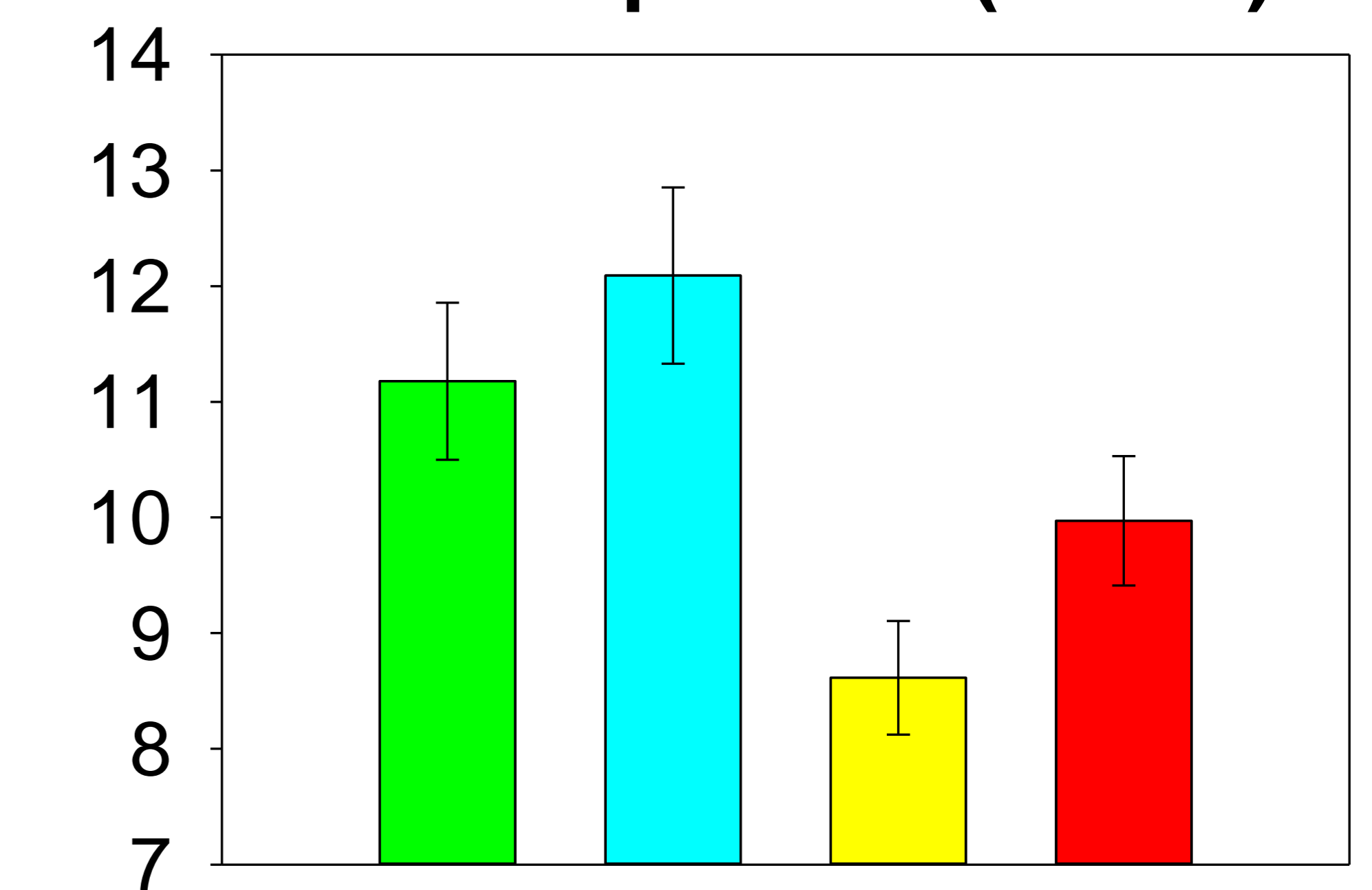
Water	15	10.5
N	320 180	320 180

Kernel size (g/kernel)



Water	15	10.5
N	320 180	320 180

Kernels per tree (x1000)



Water	15	10.5
N	320 180	320 180

- Less water = lower yield per hectare due to fewer kernels per tree
- Less N = no yield effect; smaller kernels but more kernels per tree

The larger number of kernels on the lower N trees are likely due to more light penetrating the less dense canopies of lower N trees.