AGRICULTURE VICTORIA

The effect of water and nitrogen on yield of almond trees Zelmari Coetzee, Cathy Taylor and Michael Treeby



Stable optimal yields across seasons is a priority in any agricultural industry. As

in all crops, management inputs such as water and nitrogen affect almond tree growth, fruit set, and ultimately nut yield. Optimising the use of these management inputs will contribute to stable yields and sustainable farming.

The trial was conducted on mature almond trees at Lindsay Point, north-west Victoria. The treatments were applied in a randomized design.

egular N r applied

Average kernel size (g)

% of regular irrigation applied 100 +W+N-W+N 100

ertili 56 %



Average nut yield (t/ha)



Nuts per tree (x1000)



Less water = fewer nuts per tree and lower nut yield per hectare.

\therefore Less N = smaller kernels but the yield per hectare is unchanged; more flowers are set to fruit.

Higher nut set on low N trees is likely due to the smaller canopies on these trees which may have allowed for more light penetration.

Economic Development, Jobs, Transport and Resources



