

# Effects of drought on water relations, growth and biomass distribution in *Peumus boldus molina* (monimiaceae) plants grown in a nursery Efectos de la sequía en las relaciones hídricas, crecimiento y distribución de biomasa en plantas de *peumus boldus molin*

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*Peumus boldus* (boldo) is an endemic tree species of Chile that grows in a mediterranean climate, characterized by a summer with low water availability in the soil, high solar radiation and high temperatures. In these conditions, boldo develops physiological mechanisms to survive under restricted water availability. To study the effects of water restriction on the growth of the plants, a trial was carried out under natural summer conditions with two irrigation regimes: Well watered plants (TT) and controlled water restriction (TR). Predawn leaf water potential ( $\Psi_a$ ), water content relative to predawn (CHRa) and parameters derived from pressure/volume (P/V) curves were evaluated. Height increase (L) and root collar diameter (DAC) were measured monthly. Total biomass by components, and the shoot biomass/root biomass ratio (BA/BR) were also evaluated at the beginning and the end of the water restriction period. *P. boldus* showed an elastic adjustment during water restriction period, allowing