	Control		Waterlogged		Recovery		Sig. effect	Post-hoc
	eCO_2	aCO_2	eCO_2	aCO_2	eCO_2	aCO_2		
Acacia floribunda								
Photosynthetic rate (A, μmol m^{-2} s^{-1})	13.41 (7.58)	19.25 (7.47)	20.9 (6.83)	22.06 (7.68)	17.15 (1.17)	25.11 (6.3)	C	
Stomatal conductance (Gs, mmol m^{-2} s^{-1})	0.41 (0.11)	0.41 (0.07)	0.36 (0.16)	0.24 (0.07)	0.27 (0.04)	0.49 (0.12)	NS	
Water use efficiency (A/Gs)	1 (0.43)	1.22 (0.62)	1.89 (0.53)	2.55 (0.65)	2.02 (0.35)	1.53 (0.44)	W	cw, cr
Dry root biomass (g)	5.64 (2.35)	6.02 (2.51)			3.74 (0.76)	4.64 (0.94)	W	
Dry fine root biomass (g)	2.12 (1.5)	2.27 (1.07)			1.01 (0.39)	1.21 (0.35)	W	
Dry shoot biomass (g)	8.9 (4.17)	10.93 (3.67)			9.29 (1.65)	10.27 (3.13)	NS	
Root mass fraction	0.4 (0.14)	0.35 (0.07)	0.2 (0.02)	0.24 (0.05)	0.29 (0.03)	0.32 (0.03)	W	cw, wr, cr
Fine root DMC (%)	0.13 (0.03)	0.16 (0.04)	0.18 (0.07)	0.15 (0.03)	0.13 (0.01)	0.12 (0.02)	W	wr
SLA (cm^2 g^{-1})	27.54 (2.12)	28.26 (2.33)	24.83 (2.15)	24.72 (3.12)	29.91 (2.91)	27.84 (1.4)	W	cw, wr
Stem density (g cm^{-2})	0.46 (0.07)	0.48 (0.05)	0.49 (0.04)	0.54 (0.07)	0.5 (0.02)	0.47 (0.12)	NS	
Casuarina cunninghamiana								
Photosynthetic rate (A, μmol m^{-2} s^{-1})	25.3 (6.32)	38.11 (7.8)	26.63 (7.53)	33.53 (3.75)	27.41 (1.81)	35.38 (7.6)	C	
Stomatal conductance (Gs, mmol m^{-2} s^{-1})	0.53 (0.14)	0.66 (0.15)	0.64 (0.07)	0.57 (0.07)	0.57 (0.07)	0.61 (0.14)	NS	
Water use efficiency (A/Gs)	1.5 (0.2)	1.69 (0.08)	1.26 (0.24)	1.72 (0.23)	1.65 (0.18)	1.65 (0.07)	C x W, C	w
Dry root biomass (g)	5.79 (3.1)	10.88 (3.67)			6.31 (2.07)	7.05 (2.75)	C x W, C	c
Dry fine root biomass (g)	1.66 (1.23)	4.11 (1.96)			1.95 (0.73)	2.61 (1.31)	C x W*, C	c
Dry shoot biomass (g)	10.44 (3.75)	17.19 (5.66)			11.97 (3.28)	10.55 (3)	C x W	
Root mass fraction	0.34 (0.06)	0.39 (0.04)	0.29 (0.1)	0.27 (0.04)	0.34 (0.03)	0.39 (0.04)	W	
Fine root DMC (%)	0.18 (0.08)	0.25 (0.07)	0.18 (0.08)	0.21 (0.04)	0.15 (0.02)	0.19 (0.03)	C	
SLA (cm^2 g^{-1})	20.82 (2.39)	18.84 (1.76)	20.76 (1.61)	20.57 (2.33)	20.3 (2.19)	21.61 (1.47)	NS	
Stem density (g cm^{-2})	0.4 (0.03)	0.44 (0.02)	0.34 (0.09)	0.4 (0.03)	0.41 (0.02)	0.41 (0.04)	C	

	Control		Waterlogged		Recovery		Sig. effect	Post-hoc
	eCO_2	aCO_2	eCO_2	aCO_2	eCO_2	aCO_2		
Eucalyptus camaldulensis								
Photosynthetic rate (A, μmol m^{-2} s^{-1})	9.94 (5.88)	15.46 (1.49)	15.46 (1.49)	18.39 (5.11)	17.99 (3.87)	21.09 (2.95)	C, W	cr
Stomatal conductance (Gs, mmol m^{-2} s^{-1})	0.14 (0.08)	0.17 (0.10)	0.32 (0.09)	0.28 (0.13)	0.52 (0.17)	0.35 (0.08)	W	cw, wr, cr
Water use efficiency (A/Gs)	2.1 (0.4)	3.26 (1)	1.99 (0.25)	2.65 (0.46)	1.93 (0.21)	2.48 (0.47)	C	
Dry root biomass (g)	14.85 (3.5)	14.32 (2.58)			14.09 (5.73)	13.42 (6.51)	NS	
Dry fine root biomass (g)	2.64 (1.84)	1.73 (0.93)			3.69 (2.73)	3.82 (2.22)	W	
Dry shoot biomass (g)	22.93 (5.31)	22.63 (6.13)			26.49 (10.35)	23.23 (8.49)	NS	
Root mass fraction	0.39 (0.05)	0.39 (0.05)	0.25 (0.02)	0.25 (0.06)	0.35 (0.11)	0.36 (0.05)	W	cw, rw
Fine root DMC (SLA (cm^2 g^{-1})	31.7 (8.24)	28.11 (1.74)	31.38 (1.8)	31.82 (3.61)	28.59 (1.59)	28.08 (0.74)	W	cw, wr
Stem density (g cm^{-2})	0.39 (0.02)	0.41 (0.02)	0.38 (0.02)	0.39 (0.04)	0.39 (0.04)	0.39 (0.06)	N	

Table 0.1: Mean and standard deviation (in parentheses) of measured gas exchange rates, biomass and functional traits for each combination of CO2 level and waterlogging treatments. Significant differences as determined by two-way ANOVA are denoted by the letters NS, C, W or I (NS = no significant effect of either treatment, C = significant effect of CO_2 level, W = significant effect of waterlogging treatment, C x W = significant interaction between CO_2 level and waterlogging treatment). Where interactions were found, waterlogging treatments in which significant differences between aCO_2 and eCO_2 were determined by post-hoc tests are denoted by: c = control, w = waterlogged, r = recovery. Significant differences between waterlogging treatments determined by post-hoc tests are denoted using the following script: cw = difference between control and waterlogged measurements, cr = difference between control and recovery measurements, wr = difference between waterlogged and recovery measurements. * - interaction effect was marginally significant, but post-hoc analysis confirmed significant differences among treatments.
N.B. biomass measurements for waterlogged plants are omitted because these plants were harvested at a younger age than control or recovery plants and are thus not comparable.