

## **Supplementary material**

### **Fire alters soil labile stoichiometry and litter nutrients in Australian eucalypt forests**

*Orpheus M. Butler<sup>A</sup>, Tom Lewis<sup>B</sup> and Chengrong Chen<sup>A,C</sup>*

<sup>A</sup>Griffith School of Environment and the Australian Rivers Institute, Griffith University, Nathan, Qld 4111, Australia.

<sup>B</sup>Department of Agriculture and Fisheries and University of the Sunshine Coast, Sippy Downs Drive, Sippy Downs, Qld 4556, Australia.

<sup>C</sup>Corresponding author. Email: [c.chen@griffith.edu.au](mailto:c.chen@griffith.edu.au)

**Table S1.** Pairwise comparisons of selected litter properties (means  $\pm$  SE) between NRF and RFB areas at Toohey Forest and White Rock Spring Mountain Conservation Estate (WRSMCE) sites.

		Total C (%)	Litter HWE C <sub>o</sub> (mg g <sup>-1</sup> )	Litter HWE N (mg g <sup>-1</sup> )	Litter HWE P (mg g <sup>-1</sup> )	Litter HWE C <sub>o</sub> :N	Litter HWE C <sub>o</sub> :P	Litter HWE N:P
Toohey Forest A	NRF area	49.2 ( $\pm$ 2.1)	28.4 ( $\pm$ 2.8)	0.77 ( $\pm$ 0.07)	0.032 ( $\pm$ 0.014)	37.9 ( $\pm$ 4.2)	4049 ( $\pm$ 2058)	101 ( $\pm$ 51.5)
	RFB area	52.6 ( $\pm$ 1.4)	27.6 ( $\pm$ 1.7)	0.79 ( $\pm$ 0.08)	0.068 ( $\pm$ 0.025)	36.1 ( $\pm$ 4.0)	2622 ( $\pm$ 2079)	65.2 ( $\pm$ 50.6)
	<i>P</i> -value	0.089	0.834	0.843	0.332	0.784	0.710	0.707
Toohey Forest B	NRF area	52.8 ( $\pm$ 0.7)	27.5 ( $\pm$ 0.7)	0.35 ( $\pm$ 0.02)	0.005 ( $\pm$ 0.001)	79.0 ( $\pm$ 5.3)	7646 ( $\pm$ 1868)	103 ( $\pm$ 29.0)
	RFB area	48.8 ( $\pm$ 1.9)	23.7 ( $\pm$ 2.4)	0.43 ( $\pm$ 0.02)	0.015 ( $\pm$ 0.007)	55.3 ( $\pm$ 5.8)	3036 ( $\pm$ 955)	50.5 ( $\pm$ 12.2)
	<i>P</i> -value	0.110	0.137	0.004*	0.250	0.031*	0.043*	0.110
WRSMCE A	NRF area	49.8 ( $\pm$ 1.6)	32.3 ( $\pm$ 1.1)	0.51 ( $\pm$ 0.03)	0.14 ( $\pm$ 0.01)	63.4 ( $\pm$ 3.2)	228 ( $\pm$ 23)	3.6 ( $\pm$ 0.2)
	RFB area	52.6 ( $\pm$ 0.3)	31.5 ( $\pm$ 2.1)	0.58 ( $\pm$ 0.05)	0.13 ( $\pm$ 0.01)	56.2 ( $\pm$ 16.6)	240 ( $\pm$ 52)	4.4 ( $\pm$ 0.2)
	<i>P</i> -value	0.168	0.739	0.291	0.485	0.391	0.682	0.017*
WRSMCE B	NRF area	50.4 ( $\pm$ 0.5)	27.0 ( $\pm$ 0.6)	0.61 ( $\pm$ 0.03)	0.18 ( $\pm$ 0.01)	44.9 ( $\pm$ 3.2)	150 ( $\pm$ 9.4)	3.3 ( $\pm$ 0.07)
	RFB area	50.9 ( $\pm$ 0.2)	30.5 ( $\pm$ 0.9)	0.62 ( $\pm$ 0.04)	0.20 ( $\pm$ 0.02)	50.2 ( $\pm$ 4.2)	161 ( $\pm$ 20)	3.2 ( $\pm$ 0.22)
	<i>P</i> -value	0.436	0.081	0.883	0.548	0.436	0.669	0.614

*P*-values from students' paired *t*-tests provided, with statistical significance ( $P < 0.05$ ) denoted \*,  $n = 5$ ; NRF = no recent fire; RFB = recent, frequent fire; HWE N, P and C<sub>o</sub>, = hot water extractable (i.e. 'labile') forms of total N, total P and organic C.