

**Appendix 1.** Values of pH (in pH units) measured at the beginning of the bioassays with eucalypt leachates (EL), copper and their mixtures at 10 and 20 °C (mean  $\pm$  S.E.M.) in ten replicates. The concentrations of EL are expressed as tannic acid (mg.L<sup>-1</sup>). Temp. – temperature; Treat. – treatment; Variat. – pH variation during the assay (pH at time 0 – pH at 96 h). pH units in control treatment =  $7.80 \pm 0.08$ ; Variat = 0.74.

Temp. (°C)	EL bioassays			Cu bioassays		
	Treat.	0 h	Variat.	Treat.	0 h	Variat.
<i>S. festiva</i>						
10	EL-465	3.9 $\pm$ 0.00	0.87	Cu-8.14	7.6 $\pm$ 0.01	0.33
	EL-412	4.1 $\pm$ 0.03	0.90	Cu-4.07	7.6 $\pm$ 0.03	0.45
	EL-349	4.3 $\pm$ 0.01	0.67	Cu-2.04	7.6 $\pm$ 0.02	0.55
				Cu-1.02	7.7 $\pm$ 0.02	0.41
				Cu-0.51	7.7 $\pm$ 0.01	0.15
			Cu-0.25	7.7 $\pm$ 0.00	0.11	
20	EL-434	4.0 $\pm$ 0.01	0.91	Cu-8.14	7.5 $\pm$ 0.01	0.57
	EL-325	4.3 $\pm$ 0.07	0.89	Cu-4.07	7.6 $\pm$ 0.02	0.33
	EL-279	7.4 $\pm$ 0.05	0.73	Cu-2.04	7.6 $\pm$ 0.02	0.25
				Cu-1.02	7.7 $\pm$ 0.04	0.38
				Cu-0.51	7.7 $\pm$ 0.01	0.27
			Cu-0.25	7.7 $\pm$ 0.05	0.37	
<i>A. desmarestii</i>						
10	EL-465	3.9 $\pm$ 0.00	0.90	Cu-3.26	7.7 $\pm$ 0.04	0.61
	EL-232.5	4.5 $\pm$ 0.04	0.77	Cu-1.63	7.7 $\pm$ 0.02	0.58
	EL-116.3	7.3 $\pm$ 0.01	0.75	Cu-0.81	7.7 $\pm$ 0.02	0.56
	EL-58.1	7.6 $\pm$ 0.04	0.66	Cu-0.41	7.7 $\pm$ 0.01	0.52
	EL-29.1	7.6 $\pm$ 0.04	0.35	Cu-0.20	7.7 $\pm$ 0.00	0.48
	EL-14.5	7.7 $\pm$ 0.02	0.29	Cu-0.10	7.8 $\pm$ 0.02	0.17
	EL-7.3	7.7 $\pm$ 0.05	0.12	Cu-0.05	7.8 $\pm$ 0.01	0.60
			Cu-0.03	7.8 $\pm$ 0.03	0.48	
20	EL-465	3.9 $\pm$ 0.01	0.76	Cu-3.26	7.7 $\pm$ 0.02	0.58
	EL-232.5	4.6 $\pm$ 0.07	0.81	Cu-1.63	7.7 $\pm$ 0.01	0.17
	EL-116.3	7.3 $\pm$ 0.05	0.77	Cu-0.81	7.7 $\pm$ 0.06	0.66
	EL-58.1	7.6 $\pm$ 0.01	0.58	Cu-0.41	7.7 $\pm$ 0.03	0.59
	EL-29.1	7.6 $\pm$ 0.03	0.42	Cu-0.20	7.7 $\pm$ 0.05	0.62
	EL-14.5	7.7 $\pm$ 0.00	0.26	Cu-0.10	7.8 $\pm$ 0.03	0.59
	EL-7.3	7.7 $\pm$ 0.08	0.12	Cu-0.05	7.8 $\pm$ 0.08	0.82
			Cu-0.03	7.8 $\pm$ 0.01	0.42	
<i>E. meridionalis</i>						
10	EL-465	3.9 $\pm$ 0.00	0.79	Cu-0.81	7.7 $\pm$ 0.01	0.32
	EL-232.5	4.5 $\pm$ 0.04	0.67	Cu-0.41	7.7 $\pm$ 0.06	0.12
	EL-116.3	7.3 $\pm$ 0.01	0.89	Cu-0.20	7.7 $\pm$ 0.03	0.68
	EL-58.1	7.6 $\pm$ 0.04	0.38	Cu-0.10	7.8 $\pm$ 0.01	0.29
	EL-29.1	7.6 $\pm$ 0.04	0.76	Cu-0.05	7.8 $\pm$ 0.01	0.79
	EL-14.5	7.7 $\pm$ 0.02	0.59	Cu-0.03	7.8 $\pm$ 0.01	0.36
	EL-7.3	7.7 $\pm$ 0.05	0.39			
20	EL-465	3.9 $\pm$ 0.00	0.81	Cu-0.41	7.7 $\pm$ 0.01	0.46
	EL-232.5	4.5 $\pm$ 0.04	0.79	Cu-0.20	7.7 $\pm$ 0.06	0.11
	EL-116.3	7.3 $\pm$ 0.01	0.51	Cu-0.10	7.8 $\pm$ 0.03	0.32
	EL-58.1	7.6 $\pm$ 0.04	0.39	Cu-0.05	7.8 $\pm$ 0.01	0.50
	EL-29.1	7.6 $\pm$ 0.04	0.52	Cu-0.03	7.8 $\pm$ 0.01	0.31
	EL-14.5	7.7 $\pm$ 0.02	0.41	Cu-0.01	7.8 $\pm$ 0.01	0.29
	EL-7.3	7.7 $\pm$ 0.05	0.28	Cu-0.006	7.8 $\pm$ 0.01	0.33

**Appendix 2.** Mortality recorded (%) in single eucalyptus leachates (EL), single copper bioassays (Cu) and with both stressors combined for the three selected species: *Atyaephyra desmarestii*, *E. meridionalis* and *S. festiva* at both 10 and 20 °C.

Concentration		<i>A. desmarestii</i> (a)		<i>E. meridionalis</i> (b)		<i>S. festiva</i> (c)				
						First bioassay		Second bioassay		
		10 °C	20 °C	10 °C	20 °C	10 °C	20 °C	Conc.	10 °C	20 °C
EL (mg.L <sup>-1</sup> )	0	0%	0%	0%	20%	0%	0%	0	0%	0%
	7	0%	10%	10%	20%	0%	0%	279	–	10%
	15	0%	30%	20%	20%	0%	0%	325	–	20%
	29	10%	40%	20%	30%	0%	0%	349	10%	–
	58	10%	50%	30%	30%	0%	0%	412	20%	–
	116	40%	90%	30%	40%	0%	0%	434	–	40%
	233	60%	100%	90%	90%	0%	0%	465	30%	–
	465	100%	100%	100%	100%	30%	60%			
	(a)	(b)	(c)							
Cu (mg.L <sup>-1</sup> )	0	0	0	0%	0%	0%	0%	0%	0%	
	0.03	0.006	0.25	0%	0%	–	20%	0%	0%	
	0.05	0.01	0.51	10%	20%	–	30%	0%	0%	
	0.10	0.03	1.02	30%	30%	10%	30%	0%	0%	
	0.20	0.05	2.04	50%	60%	10%	40%	10%	20%	
	0.41	0.10	4.07	70%	80%	20%	80%	30%	30%	
	0.81	0.20	8.14	90%	90%	30%	90%	40%	50%	
	1.63	0.41		90%	100%	60%	100%			
	3.26	0.81		100%	100%	90%	–			
Combination EL + CU	EL 0 + CU 0 (control)			0%	0%	15%	20%	0%	0%	
	EL-LC <sub>10</sub> + Cu-LC <sub>10</sub>			0%	20%	22.5%	67.5%	0%	20%	
	EL-LC <sub>20</sub> + Cu-LC <sub>20</sub>			10%	20%	35%	47.5%	10%	40%	
	EL-LC <sub>50</sub> + Cu-LC <sub>50</sub>			40%	70%	75%	97.5%	30%	60%	