

1    **Supplementary Information**

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3    Manuscript Title:

4    THE IMPACT OF BLACK CARBON IN THE EXTRACTION AND MINERALIZATION

5    OF PHENANTHRENE IN SOIL

6

7    Angela H. Rhodes, Alisdair Carlin and Kirk T. Semple\*

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9    Number of pages: 6

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11    Number of figures: 4

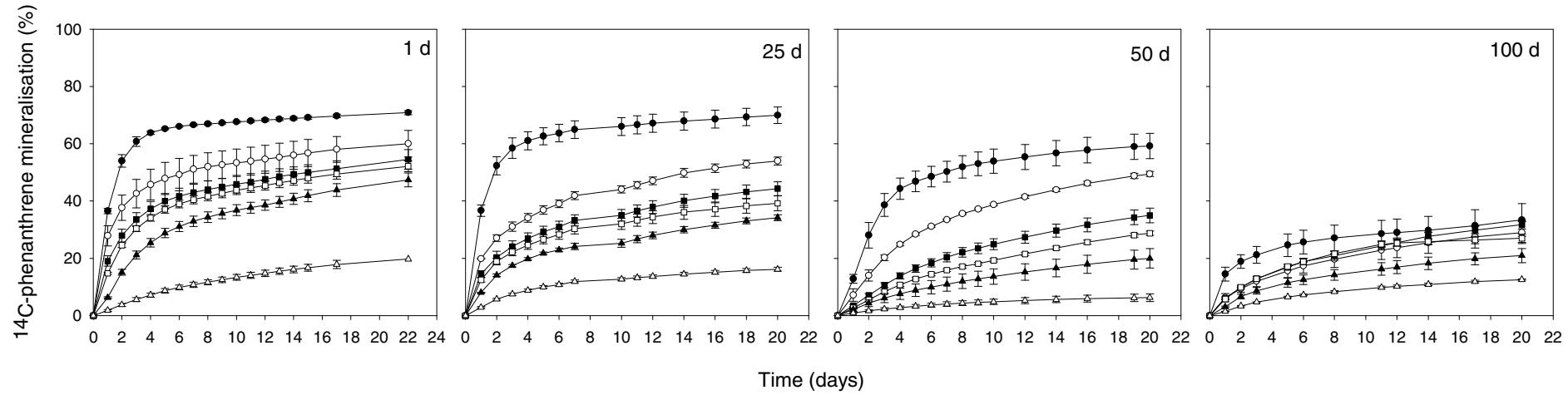
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13    Number of tables: 1

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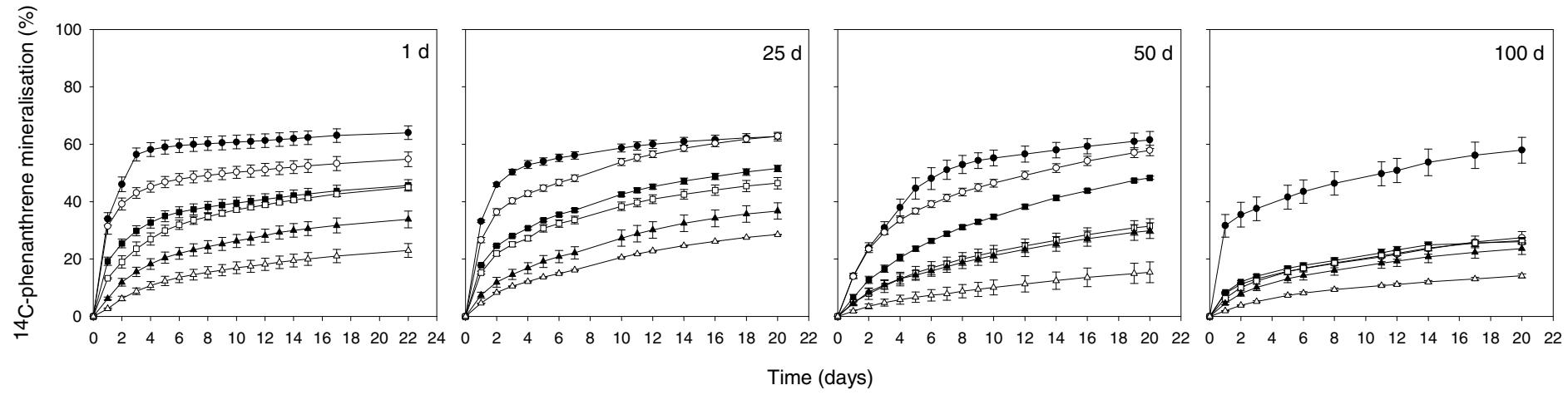
15 Table S1. Fastest initial rates of  $^{14}\text{C}$ -phenanthrene mineralisation in Soils A, B, C and D (% d<sup>-1</sup>)  
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Ageing Time	BC	Soil A	Soil B	Soil C	Soil D
1 d	0	36.5	34.0	34.0	35.5
	0.1	27.9	31.4	21.5	17.6
	0.5	19.0	19.2	14.2	16.9
	1	14.8	13.3	10.0	8.9
	2.5	8.8	6.2	5.6	5.1
	5	2.0	3.5	5.9	2.8
25 d	0	36.6	33.2	27.3	30.5
	0.1	19.8	26.6	22.8	12.8
	0.5	14.4	17.8	13.1	17.7
	1	12.5	15.2	9.0	11.2
	2.5	8.1	7.4	5.9	4.3
	5	2.9	4.6	3.8	1.9
50 d	0	15.2	14.1	30.3	23.5
	0.1	7.2	13.9	23.8	19.1
	0.5	3.6	6.5	12.9	14.9
	1	2.8	4.9	11.3	11.4
	2.5	2.2	4.5	8.0	6.0
	5	0.8	1.9	4.8	5.0
100 d	0	14.5	28.3	23.3	17.0
	0.1	6.3	8.0	19.6	19.6
	0.5	6.0	8.3	12.7	16.4
	1	5.8	6.3	13.1	10.9
	2.5	3.6	4.5	13.5	11.8
	5	1.9	2.2	6.8	6.2



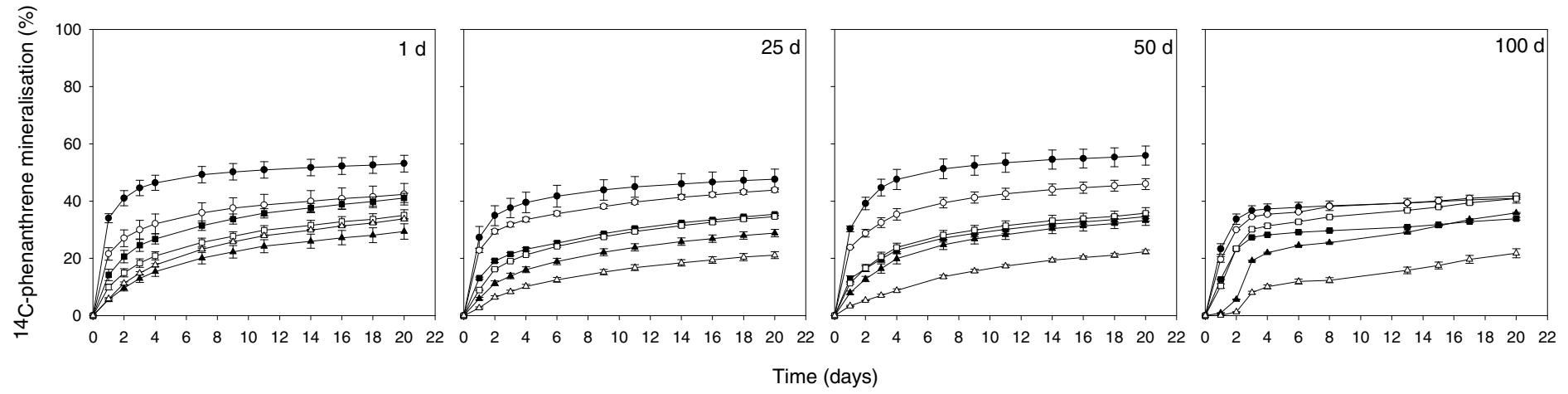
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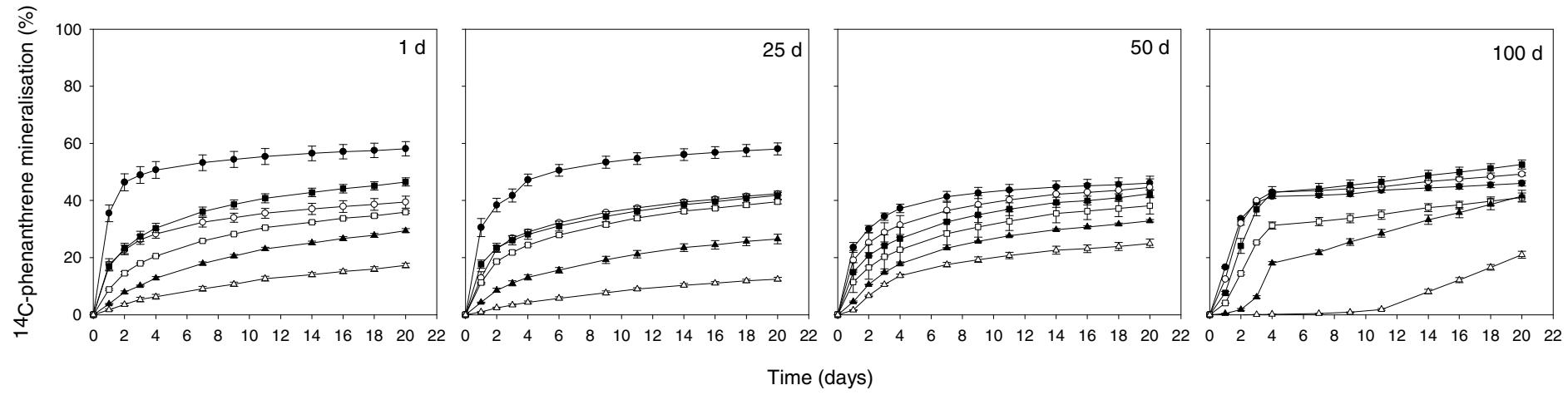
20 **Figure S1.** Mineralisation of 10 mg kg<sup>-1</sup> phenanthrene in Soil A amended with 0% (●), 0.1% (○), 0.5% (■), 1% (□), 2.5% (▲) and 5% (△) BC  
21 after 1, 25, 50 and 100 d soil-PAH contact time. Error bars, where visible, are the S.E.M.



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24 **Figure S2.** Mineralisation of  $10 \text{ mg kg}^{-1}$  phenanthrene in Soil B amended with 0% (●), 0.1% (○), 0.5% (■), 1% (□), 2.5% (▲) and 5% (△) BC  
25 after 1, 25, 50 and 100 d soil-PAH contact time. Error bars, where visible, are the S.E.M.





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33 **Figure S4.** Mineralisation of  $10 \text{ mg kg}^{-1}$  phenanthrene in Soil D amended with 0% (●), 0.1% (○), 0.5% (■), 1% (□), 2.5% (▲) and 5% (△) BC  
34 after 1, 25, 50 and 100 d soil-PAH contact time. Error bars, where visible, are the S.E.M.

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