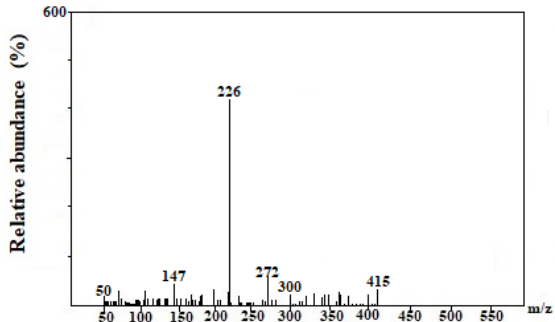
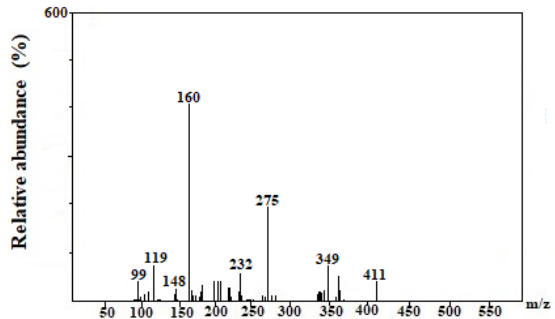


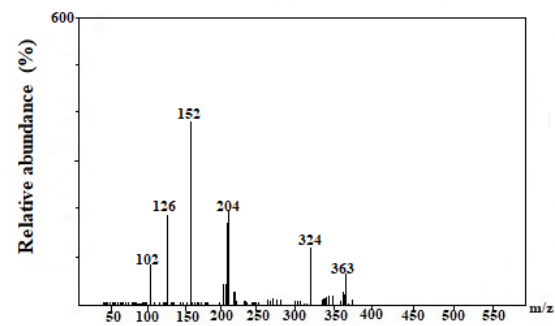
Supporting materials

Table SM1 GC-MS data of obtained metabolite after anthracene degradation by *A. sydowii*

Peak	RT (min)	<i>m/z</i>	Mol. weight	Area (%)	Mass spectra/Name
1.	28.90	226	226.2	49.70	 <p>Anthracene-1,8,9(2<i>H</i>,8<i>aH</i>,9<i>aH</i>)-trione</p>
2.	21.73	160	160.2	18.94	

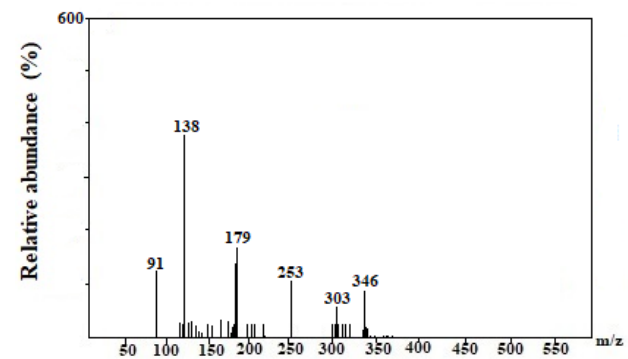
2,4a-dihydronaphthalene-1,5-dione

3. 13.8 152 152.1 16.70



1,3,3a,7a-tetrahydro-2-benzofuran-4,7-dione

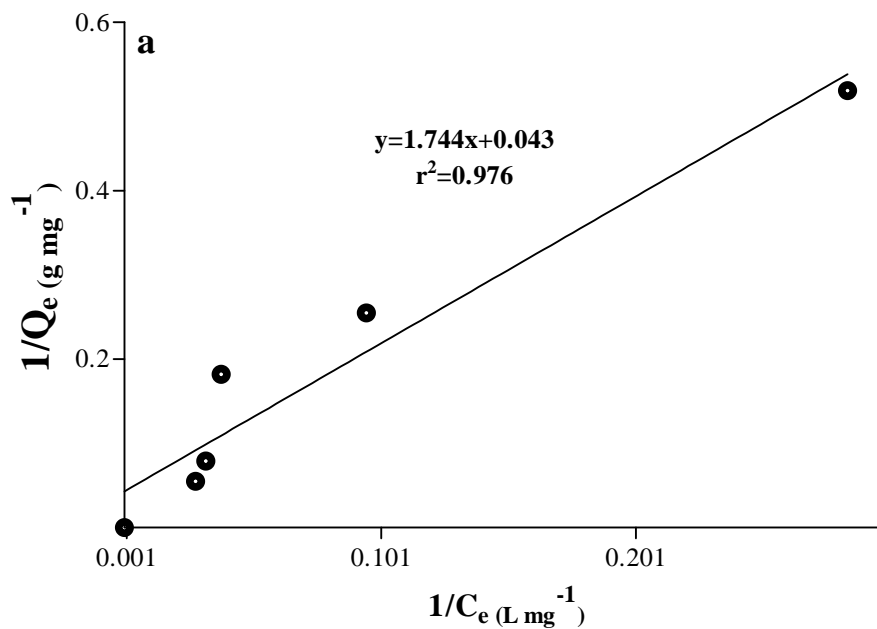
4. 11.6 138 136.1 14.66



2-hydroxybenzoic acid

Table SM2 HPLC analysis data of anthracene before and after treatment with *A. sydowii*

Peak	Untreated anthracene (control) (min)	Treated anthracene (min)
1	1.225	1.417
2	1.372	1.523
3		1.771
4		1.884



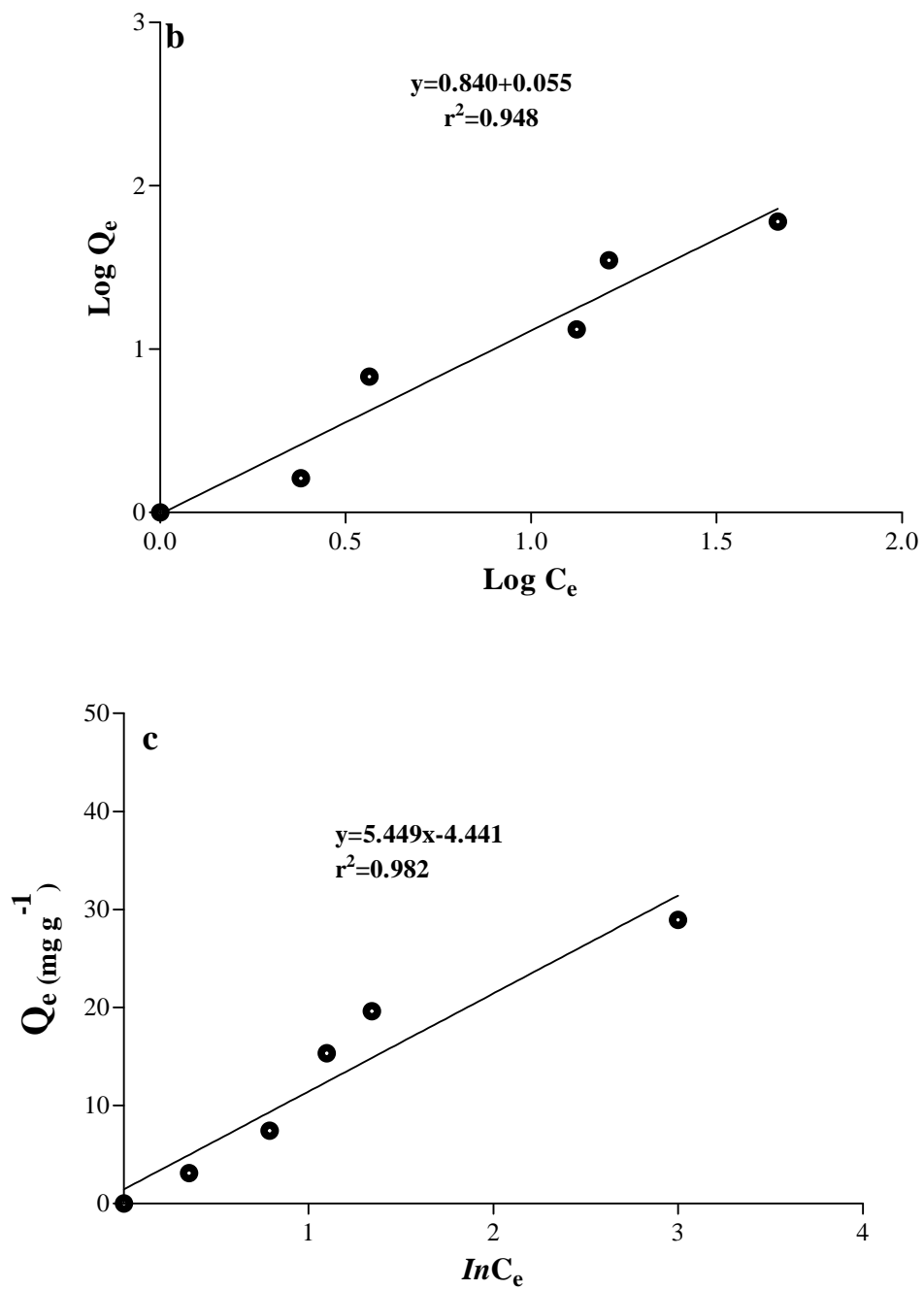


Fig. SM1 Regression plots of the isotherm models (a) Langmuir (b) Freundlich (c) Temkin for anthracene degradation by *A. sydowii*

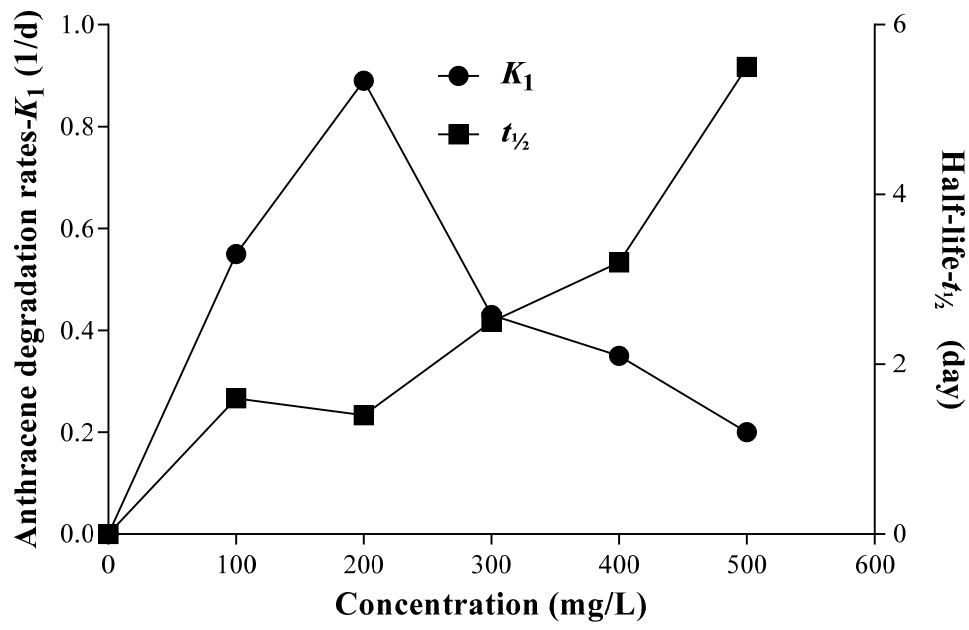


Fig. SM2 Time course changes in anthracene degradation rates (K_1) and half-life ($t_{1/2}$)