

Supporting Information

Enantioselective bioactivity and acute toxicity of isocarbophos to various terrestrial organisms and its enantioselective bioaccumulation and degradation in earthworms

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21 Table S1. The test concentrations of rac-ICP, R-(-)-ICP and S-(+)-ICP.

test organisms		test concentrations (mg/L)						
		1	2	3	4	5	6	7
<i>T. cinnabarinus</i>	rac-ICP	100	50.0	25.0	12.5	6.25		
	R-(-)-ICP	500						
	S-(+)-ICP	100	50.0	25.0	12.5	6.25		
<i>M. separata</i>	rac-ICP	50.0	25.0	12.5	6.25	3.12		
	R-(-)-ICP	500						
	S-(+)-ICP	50.0	25.0	12.5	6.25	3.12		
<i>A. craccivora</i>	rac-ICP	50.0	25.0	12.5	6.25	3.12		
	R-(-)-ICP	500						
	S-(+)-ICP	50.0	25.0	12.5	6.25	3.12		
<i>P. xylostella</i>	rac-ICP	100	50.0	25.0	12.5	6.25		
	R-(-)-ICP	500						
	S-(+)-ICP	100	50.0	25.0	12.5	6.25		
<i>A. mellifera</i> L. (oral) ^a	rac-ICP	0.143	0.0892	0.0558	0.0348	0.0218	0.0136	
	R-(-)-ICP	4.00	2.50	1.56	0.976	0.610	0.382	
	S-(+)-ICP	0.114	0.0670	0.0394	0.0232	0.0136	0.00802	
<i>A. mellifera</i> L. (contact) ^a	rac-ICP	0.238	0.170	0.121	0.0867	0.0619	0.0442	
	R-(-)-ICP	10.0	7.14	5.10	3.64	2.60	1.86	
	S-(+)-ICP	0.114	0.0814	0.0582	0.0415	0.0297	0.0121	
<i>B. mori</i>	rac-ICP	9.51	7.93	6.60	5.50	4.59	3.82	3.19
	R-(-)-ICP	1003						
	S-(+)-ICP	9.12	7.60	6.33	5.28	4.40	3.67	3.05
<i>T. nubilale</i> ^b	rac-ICP	0.0374	0.0187	0.00936	0.00468	0.00234	0.00117	0.000585
	R-(-)-ICP	0.300	0.150	0.0750	0.0375	0.0188	0.00938	0.00469
	S-(+)-ICP	0.0374	0.0187	0.00936	0.00468	0.00234	0.00117	0.000585
<i>E. fetida</i> ^b	rac-ICP	19.0	14.6	11.2	8.65	6.63	5.12	3.96
	R-(-)-ICP	87.6	67.4	51.9	40.0	30.7	23.6	18.2
	S-(+)-ICP	19.1	14.7	11.3	8.68	6.70	5.12	3.96

^a The unit of test concentrations for *A. mellifera* L. is µg/bee

^b The unit of test concentrations for *T. nubilale* and *E. fetida* is µg/cm²

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23 Table S2. The accumulation factor (AF) values (mean ± SD) in earthworms in group B, **triplicates**

24 **for each treatment.**

Accumulation factor AF	Exposure time (days)							
	0.5	1	3	5	7	10	14	21
R-(-)-ICP	0.0035±0.0003	0.0106±0.0006	0.0496±0.0128	0.317±0.069	0.544±0.163	0.302±0.032	0.772±0.041	1.41±0.21
S-(+)-ICP	0.0026±0.0002	0.0076±0.0003	0.0415±0.096	0.197±0.089	0.255±0.074	0.217±0.078	0.715±0.092	1.18±0.16

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