

SUPPLEMENTARY MATERIAL

Pesticides in the atmospheric environment: An overview on their determination methodologies

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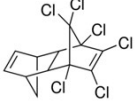
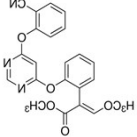
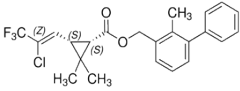
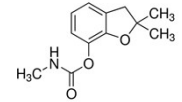
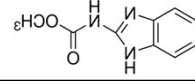
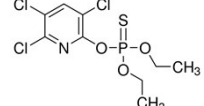
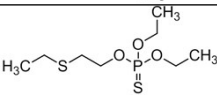
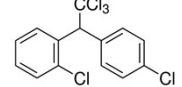
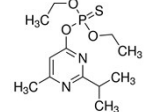
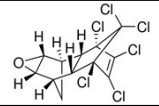
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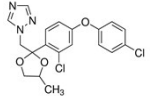
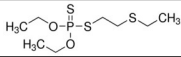
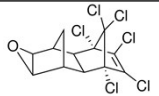
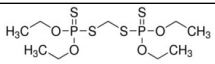
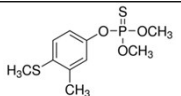
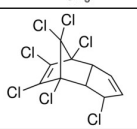
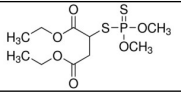
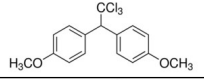
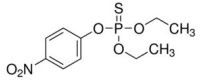
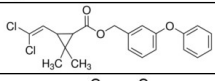
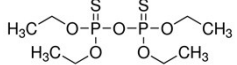
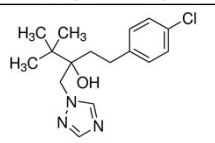
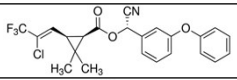
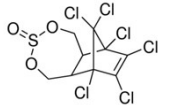
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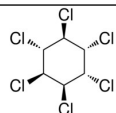
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Table S1. Classification and physical-chemical properties of some pesticides [1,2].

Pesticide	Chemical structure	Melting point (°C)	Boiling point (°C)	Henry's Law Constant (Pa m ³ mol ⁻¹)	Vapour pressure (mPa)	Log Kow	Half-life (soil degradation)/persistence
Aldrin		104	145	1.72 X 10 ¹	8.6	6.5	365 days/very persistent
Azoxystrobin		116	360	7.40 x 10 ⁻⁹	1.10 x 10 ⁻⁷	2.5	180.7 days/moderately persistent
Bifenthrin		79.6	DBB ^a	7.74 x 10 ⁻⁵	1.78 x 10 ⁻²	6.6	86.8 days/moderately persistent
Carbofuran		153.1	254	5.00 x 10 ⁻⁵	8.0 x 10 ⁻²	1.8	14 days/non-persistent
Carbendazim		305	DBB ^a	9.00 x 10 ⁻²	3.60 x 10 ⁻³	1.48	22 days/non persistent
Chlorpyrifos		42	DBB ^a	0.478	1.43	4.7	27.6 days/non-persistent
Demeton		-25	125	0.387	3.26	3.21	Not informed
2,4'-DDT		109	185	8.43 x 10 ⁻¹	2.5 x 10 ⁻²	6.91	6200 days/very persistent
Diazinon		Not informed	DBB ^a	6.09x10 ⁻²	11.97	1.14	18.4 days/non-persistent
Dieldrin		177	385	6.50 x 10 ⁻⁰²	2.4 x 10 ⁻²	3.7	1400 days/very persistent

Difenoconazol		82.5	101	9.0×10^{-07}	3.33×10^{-5}	4.36	85 days/moderately persistent
Disulfoton		-25	Not informed	1.60×10^{-1}	7.2	3.95	30 days/moderately persistent
Endrin		200	Not informed	1.48×10^{-1}	2.0×10^{-7}	3.2	4300 days/very persistent
Ethion		-12	165	3.85×10^{-2}	0.2	5.07	90 days/moderately persistent
Fenthion		7.5	90	2.40×10^{-2}	0.37	4.84	22 days/non-persistent
Heptachlor		95	135	3.53×10^2	53	5.44	250 days/persistent
Malathion		-20	DBB ^a	1.00×10^{-3}	3.1	2.75	1 day/non-persistent
Methoxychlor		87	Not informed	2.00×10^{-2}	8.0×10^{-2}	5.83	120 days/persistent
Parathion		6.1	375	3.02×10^{-2}	0.89	3.83	49 days/moderately persistent
Permethrin		34.5	200	1.89×10^{-1}	2.0×10^{-3}	6.1	42 days/moderately persistent
Sulfotep		Not informed	Not informed	4.50×10^{-1}	14	3.99	28 days/non-persistent
Tebuconazole		105	DBB ^a	1.00×10^{-5}	1.30×10^{-3}	3.7	47.1 days/moderately persistent
λ-Cyhalothrin		49.2	DBB ^a	2.00×10^{-2}	2.0×10^{-4}	5.5	175/persistent
Endosulfan		80	Not informed	1.48	0.83	4.75	86/moderately persistent

Hexachlorocyclohexane



Not informed

Not informed

Not informed

Not informed

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Not informed

^aDBB: decompose before boiling point.

REFERENCES

[1] International Union of Pure and Applied Chemistry (IUPAC). Global available of information on agrochemicals. Available in: <<https://sitem.herts.ac.uk/aeru/iupac/Reports/276.htm>>. Accessed in: 29 mai 2018.

[2] Sigma Aldrich. Available in: <<https://www.sigmaaldrich.com/brazil.html>>. Accessed in: 29 mai 2018.