APPENDIX I: PESTDATA



Caution: Use this table only as a quick reference for tentative identification of residues found in samples analyzed by the most commonly used PAM I multiresidue methods. Always compare the residue to a standard chromatographed in your own gas chromatograph. Apply appropriate confirmatory tests to verify tentative identification. Note that PESTDATA cannot and does not contain all details; consult PAM I tables that accompany each method for more definitive information about the behavior of the compound through the steps of the methods.

NOTATIONS AND ABBREVIATIONS USED IN PESTDATA

(In all categories a hyphen indicates absence of data)

Name

Preferred name for each chemical. "*" indicates chemicals with multiple GLC peaks. Chlordane, Strobane, toxaphene and all Aroclors are listed only in the table ordered by name and do not appear in the tables ordered by relative retention times.

Molecular Formula

Numbers are not subscripted. Averages are used for multicomponent chemicals.

RRT/c

Columns list retention times (relative to chlorpyrifos) on GLC column indicated. Conditions under which these data were gathered are described in these Section 302 DG modules:

GLC Column	Section 302 DG modules
OV-101	DG1-DG5
OV-17	DG13-DG17
OV-225	DG18, DG19

Note that headers in these tables refer to GLC columns by the names used for packed columns, despite DG1-DG19's descriptions of wide bore capillary column systems, because so many of these rrts were developed using packed columns. Rrt data for equivalent packed and capillary columns are expected to be essentially identical and are combined in PESTDATA.

Responses

Data specify column and detector used. Numbers refer to weight (ng) that causes detector response of approximately 50% full scale deflection (FSD) on the recording device. Response values collected when the detector was combined with a wide bore capillary column include the notation "(WB)." Codes refer to detectors and operating conditions described in these Section 302 DG modules, except that all response values are based on detector sensitivity of 50% FSD to 1.5 ng chlorpyrifos:

<u>Code</u>	<u>Detector</u>	Section 302 DG modules
TR	tritium electron capture	none - obsolete detector
TI	thermionic (KCl)	none - obsolete detector
FP	flame photometric, phosphorus	DG2, DG14, DG19
FS	flame photometric, sulfur	DG15
NI	⁶³ Ni electron capture	DG1, DG13, DG18
NP	nitrogen/phosphorus	DG5, DG17
HX	electroconductivity (halogen mode)	DG3, DG16
HN	electroconductivity (nitrogen mode)	DG4
MC	microcoulometric	none - obsolete detector

NOTES: Response values are approximate and can vary dramatically on different chromatographs. Most response values represent rounded-off or averaged values; some were collected under conditions different from those suggested in references.

Recoveries

Data on the recovery of the compound through several PAM I methods are listed in columns with the following headings. See the appropriate PAM I table(s) for more details, such as partial recoveries through Florisil.

<u>Heading</u>	Common Name	PAM I Section	<u>PAM I Table</u>
302	Luke (Los Angeles)	302 E1-E3, no cleanup	302-a
303	Mills, Onley, Gaither	303 E1-E5 + C1 or C2	303-a
304	Mills fatty food	304 E1-E5 + C1-C4	304-a
Ethers	Florisil elution system	303 C1, 304 C1 and C3	303-a, 304-a
$\mathrm{CH_{9}Cl_{2}}$	alternative Florisil elution	303 C2, 304 C2 and C4	303-a, 304-a

Recovery codes have the following meanings: C: complete (>80%); P: partial (50-80%); S: small (<50%); V: variable; R: recovered but no quantitative information available; NR: not recovered.

Appendix I: PESTDATA Chemicals in Order by Chemical Name

	Molecular	RRT/c	RRT/c	RRT/c		Rec	overies	4 Ethers	
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
1,1'-(2,2-dichloroethylidene) bis (2-methoxybenzene)	C16H16Cl2O2 Responses:	2.9	-	3.7	-	R	-	-	-
1,2,3,4-tetrachlorobenzene	C6H2Cl4 Responses: OV-l	- 17: NI0.2	-	0.09	-	-	-	-	-
1,2,3,5-tetrachlorobenzene	C6H2Cl4 Responses: OV-l	- 17: NI0.1	-	0.07	-	P#	-	6	1
1,2,3-trichlorobenzene	C6H3Cl3 Responses: OV-10	0.08 01: TR2	-	-	-	С	P	6	1
1,2,4,5-tetrachloro-3-(methylthio)= benzene	C7H4Cl4S Responses: OV-10	0.49 01: NI0.3 OV-17	0.35 : HX(WB)0.3	0.48 3 OV-225: NI0.3	R	С	-	6	1
1,2,4,5-tetrachlorobenzene	C6H2Cl4 Responses: OV-l	- 17: NI0.2	-	0.07	-	-	-	-	-
1,2,4-triazole	C2H3N3 Responses: DEG	0.2 S: NP3	-	0.27	V	NR	NR	6-15-50	1-2-3
1-hydroxychlordene	C10H6Cl6O Responses: OV-10	0.99 01: NI(WB)7 OV	1.63 V-17: NI1 OV	1.07 7-225: NI1	-	R	-	15	-
1-methyl cyromazine	C7H13N6 Responses: OV-1	- 7: NP1000	-	0.72	-	-	-	-	-
10,10-dihydromirex	C10H2Cl10 Responses: OV-10	2.67 01: NI7	-	-	-	C	-	6	-
10-monohydromirex	C10HCl11 Responses: OV-10	4.26 01: NI7	-	-	-	С	-	6	-
2,3,5,6-tetrachloroanisidine	C7H5Cl4NO Responses: OV-10	0.59 01: NI0.5 OV-17	0.73 : HX(WB)0.6	0.66 6 OV-225: NI0.5	-	С	-	6	2
2,3,5,6-tetrachloroanisole	C7H4Cl4O Responses: OV-10	0.24 01: NI0.2 OV-17	0.15 : HX(WB)0.3	0.22 3 OV-225: NI0.2	-	С	-	6	1
2,3,5,6-tetrachloronitroanisole	C7H3Cl4NO3 Responses: OV-10	0.56 01: NI0.4 OV-17	0.63 : HX(WB)0.5	0.56 6 OV-225: NI0.4	-	С	-	6	1+2
2,3,5,6-tetrafluoro-4-hydroxymethyl=benzoic acid	C8H4OF4 Responses:	-	-	-	-	-	-	-	-

^{*} Multipeak chemical.

[#] Recovery may vary with choice of Florisil elution system; see Tables 303-a, 304-a.

	Molecular	RRT/c	RRT/c	RRT/c		:	Recoveries	50	ies	
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂	
2,3,5-trimethacarb	C11H15NO2	0.35	0.6	0.38	\mathbf{C}	S#	NR	50	1-2-3	
	Responses: OV-101:	NP8 OV-17:	NP4 OV-225	: NP10						
2,3-dihydro-3,3-methyl-2-oxo-5- benzofuranyl methyl sulfonate	C11H12O5S	0.68	2.89	0.93 NI4.5 OV-225: FS63/N	-	-	-	-	-	
·	-			N14.5 OV-225; F505/T	NIIU					
2,4,5-T BEP ester*	C17H23Cl3O3	0.16	0.14	-	-	-	-	-	-	
		0.68	0.66	-						
		1.08	0.91	-						
		2.85	1.19	-						
		3.3	2.78	-						
		5.3	3.28	-						
		7	7.7	-						
	Responses: OV-101:	TR35								
2,4,5-T butoxyethyl ester*	C14H17Cl3O4	-	2.66	-	-	-	-	_	-	
, ,		2.91	3.3	_						
	Responses: OV-101:	TR4								
2,4,5-T butyl esters*	C12H13Cl3O3	-	-	1.05	-	-	-	_	-	
•		-	-	0.86						
	Responses:									
2,4,5-T ethylhexyl ester	C16H21Cl3O3	3.38	-	2.62	-	-	-	-	-	
	Responses: OV-101:	: NI5								
2,4,5-T isobutyl ester	C12H13Cl3O3	0.94	-	_	-	_	_	_	_	
<u> </u>	Responses: OV-101:									
2,4,5-T isooctyl ester*	C16H21Cl3O3	_	2.69	-	-	-	-	_	-	
,		2.56	3.1	_						
		2.96	3.4	_						
		3.25	3.8	-						
	Responses: OV-101:									
2,4,5-T isopropyl ester	C11H11Cl3O3	0.67	0.65	-	-	-	-	-	-	
	Responses: OV-101:	TR2								
2,4,5-T methyl ester	C9H7Cl3O3	0.49	0.63	0.47	-	-	-	-	-	
	Responses: OV-101:	TR1								
2,4,5-T n-butyl ester	C12H13Cl3O3	1.1	-	-	-	-	-	-	-	
, , , , , , , , , , , , , , , , , , ,	Responses: OV-101:									
2,4,5-T propylene glycol butyl	C15H19Cl3O4	2.37	-	-	-	-	-	-	-	
ether esters	Responses:									

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ C	
2,4,5-trichloro-alpha-methylbenzene= nethanol	C8H7OCl3 Responses:	0.34	-	0.25	R	R	-	15	-	
2,4-D BEP ester*	C17H24Cl2O4	-	0.08	-	-	-	-	-	-	
		0.69	0.74	-						
		1.66	1.18	-						
		2	1.79	-						
		3.22	2.09	-						
		4.1	5.1	-						
		10.2	13	-						
	Responses: OV-10	01: TR60								
2,4-D butoxyethyl ester*	C14H18Cl2O4	-	1.67	1.44	-	-	-	-	-	
		1.82	2.08	1.79						
	Responses: OV-10	01: TR12 OV-17	: NI5							
2,4-D ethyl hexyl ester*	C16H22Cl2O3	-	1.51	-	-	-	-	-	-	
·		2.1	1.78	1.68						
	Responses: OV-10)1: NI5								
2,4-D isobutyl ester	C12H14Cl2O3 Responses: OV-10	0.62 01: TR5	0.62	0.49	-	-	-	-	-	
2,4-D isooctyl ester*	C16H22Cl2O3	-	-	1.48	-	-	-	-	-	
		2.04	1.78	1.78						
	Responses: OV-10	01: TR50 OV-17	: NI5							
2,4-D isopropyl ester*	C11H12Cl2O3	-	0.62	-	-	-	-	-	_	
,		0.42	0.74	0.33						
	Responses: OV-10	01: TR10								
2,4-D methyl ester	C9H8Cl2O3 Responses: OV-10	0.3)1: TR6	0.38	0.25	-	-	-	-	-	
2,4-D n-butyl ester	C12H14Cl2O3 Responses: OV-10	0.72 01: TR40	-	-	-	-	-	-	-	
2,4-D propylene glycol butyl ether	C15H2OCl2O4	-	1.42	-	-	-	-	-	_	
ester*		1.54	3.6	-						
	Responses: OV-10	01: TR20								
2,4-DB methyl ester	C11H12Cl2O3 Responses: OV-10	0.62 01: TR28	0.72	-	-	-	-	-	-	
2,4-dichloro-6-nitrobenzenamine	C6H4Cl2N2O2 Responses: OV-10	0.3	-	-	-	R	-	15	2	

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
2,6-dichlorobenzamide	C7H5NOCl2 Responses:	0.39	1.3	0.52	С	NR	NR	6-15-50	1-2-3
2,8-dihydromirex	C10H2Cl10 Responses: OV-101	2.41 : NI4	-	-	-	С	-	6	-
2-chloroethyl caprate	C8H15ClO2 Responses: OV-101	0.32 : HX2	-	-	-	С	С	15	2
2-chloroethyl laurate	C14H27ClO2 Responses: OV-101	0.59 : HX2	-	-	-	С	С	15	2
2-chloroethyl linoleate	C20H35ClO2 Responses: OV-101	4.1 : HX15	-	-	-	V	P	15	2
2-chloroethyl myristate	C16H31ClO2 Responses: OV-101	1.17 : HX4	-	-	С	V	V	15	2
2-chloroethyl palmitate	C18H35ClO2 Responses: OV-101	2.35 : HX10	-	-	-	V	P	15	2
2-hydroxy-2,3-dihydro-3,3-methyl-5- benzofuranyl methyl sulfonate	C11H14O5S Responses: OV-101	1 :: FS48/NI135	6.6 OV-17: FS88	1.46 /NI96 OV-225: FS17	- 5/NI400	-	-	-	-
2-methoxy-3,5,6-trichloropyridine	C6H4Cl3NO Responses: OV-101	0.19 : NI0.5/NI(WI	0.08 B)0.4/NP(WI	0.1 3)9 OV-17: HX1.5	С	P #	С	6+15	1+2
3, 5, 6-trichloro-2-pyridinol methyl ester	C6H4Cl3NO Responses: OV-101	0.32 : NI(WB)0.6/I	0.44 NP(WB)5	0.36	-	-	-	-	-
3,4,5-trimethacarb	C11H15NO2 Responses: OV-101	0.45 : NP25 OV-17	0.78 : NP10 OV-2	0.5 25: NP200	С	NR	NR	50	1-2-3
3,4-dichloroaniline	C6H5Cl2N Responses: OV-101	0.2 : HX0.6/NI16	0.32 /NP1 OV-17	0.16 : NI13/NP8 OV-225:	V NI30	S	-	15	-
3,4-dichlorophenylurea	C7H6Cl2N2O Responses: OV-101	0.22 : HX9/NI18/1	0.14 NP60 OV-17:	0.1 NI4 OV-225: NI6	-	NR	NR	6-15-50	-
3,5-dichloroaniline	C6H5Cl2N Responses: OV-101 NP(WB)0.4 OV-			0.14 I(WB)16/NP0.9/NP	S (WB)1 OV-17: HN(S WB)0.3/H2	S K(WB)2/N	6+15 I8/NI(WB)14	1+2 4/NP8/
3-(3,4-dichlorophenyl)-1- methoxyurea	C8H8Cl2N2O2 Responses: OV-101	0.21 : HX9/NI25(- OV-17: NP250	1.36	R	NR	NR	6-15-50	-
3-aminophenol	C6H7NO Responses:	-	-	-	-	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c		Rec	overies		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
3-carboxy-5-ethoxy-1,2,4-thiadiazole	C3H2N2O3S Responses: OV-101:	0.22 NI170/NP40	0.25 OV-17: NI16	0.2 60/NP30 OV-225: N	NR I100 DEGS: NI200/	- NP40	-	-	-
3-chloro-5-methyl-4-nitro-1H- pyrazole	C4H4ClN3O2 Responses:	1.07	-	-	С	-	-	-	-
3-desmethyl sulfentrazone	C10H8Cl2F2N4O3S Responses: OV-101:	3.3 NI(WB)0.1/I	- NP(WB)37 C	7.5 V-17: FS(WB)1500/	- NI(WB)0.1/NP(WB)	NR)73	NR	6-15-50	1-2-3
3-hydroxycarbofuran	C12H15NO4 Responses:	-	-	-	-	-	-	-	-
3-hydroxymethyl-2,5-dimethylphenyl methylcarbamate	C11H15NO3 Responses: OV-101:	0.8 NP200 OV-1	- 7: NP600	1.03	-	NR	NR	6-15-50	1-2-3
3-ketocarbofuran	C12H12NO4 Responses: OV-101:	0.55 HN(WB)17/	1.41 NI(WB)15/N	0.9 IP(WB)9 OV-17: HN	S I(WB)15/NI(WB)80	NR /NP(WB)30	NR O OV-225:	6 NI(WB)80	1
3-methyl-4-nitrophenol	C7H7O3N Responses: OV-101:	0.38 NI13/NP50	0.63 OV-17: NI5/1	0.26 NP20 OV-225: NI250	V	NR	NR	6-15-50	1-2-3
3-methyl-4-nitrophenol methyl ether	C8H9O3N Responses: OV-101:	0.17 NI3/NP7 OV	0.22 V-17: NI1/NP	0.13 2 OV-225: NI2	-	-	-	-	-
3-phenoxybenzenemethanol	C13H12O2 Responses: OV-101:	1.28 NI1000 OV-1	- 17: NI1000	1.6	-	-	-	-	-
3-tert-butyl-5-chloro-6-hydroxy= methyluracil	C9H13ClN2O3 Responses: OV-101: OV-225: NI(WB)6		2.27 IX(WB)40/N	2.55 I(WB)67/NP(WB)3	- 9 OV-17: HN(WB)1:	NR 3/HX(WB)	NR 99/NI(WB	6-15-50)35/NP(WB)	1-2-3 290
4,4'-dichlorobiphenyl	C12H8Cl2 Responses:	-	-	0.51	-	-	-	-	-
4-(2,4-dichlorophenoxy)= benzenamine	C12H9Cl2NO Responses: OV-101:	1.44 TR60	-	-	-	-	-	-	-
4-(dichloroacetyl)-l-oxa-4-azapiro= [4.5]decane	C10H15Cl2NO2 Responses: OV-101:	0.5 NI1.4/NP34	0.69 OV-17: NI1.1	0.48 /NP1.2 OV-225: NI	C 1.6	P	-	50	3
4-chloro-6-methoxyindole	C9H8NOCl Responses: OV-101:	0.54 HX2.5/NI10	- 00 OV-17: H	0.66 X0	-	R	-	15	-
4-chlorobenzeneamine	C6H6ClN Responses:OV-17:N	- P(WB)1.5	-	0.07	S	NR	NR	6-15-50	1-2-3

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
4-chlorobenzylmethyl sulfone	C8H9ClO2S Responses: OV-101: N	0.41 NI(WB)0.4 (1.91 OV-17: NI(W	0.66 B)0.8 OV-225: NI(WB)	- 2	NR	NR	6-15-50	1-2-3
4-chlorobenzylmethyl sulfoxide	C8H9ClOS Responses: OV-101: N	0.39 NI(WB)20 C	1.16 OV-17: NI(WE	0.54 3)16 OV-225: NI(WB)5	- 5	NR	NR	6-15-50	1-2-3
4-chlorobiphenyl	C12H9Cl Responses:	-	-	0.2	-	-	-	-	-
4-chlorophenoxyaniline*	C12H10ClNO Responses: OV-101: I	0.87 1.28 HX7/NI1100	- -)	1.07 1.31	S	-	-	-	-
4-chlorophenylurea	C7H7ClN2O Responses:OV-101:N	0.54 I(WB)15 OV	- 7-17:NI(WB)4	1.07	NR	NR	NR	6-15-50	1-2-3
$\label{eq:continuity} \begin{split} \text{4-hydroxymethyl-3,5-dimethylphenyl} \\ \text{methylcarbamate*} \end{split}$	C11H15NO3 Responses: OV-101: N	0.18 0.27 NI200 OV-1	- - 7: NI150	0.22 0.31	-	NR	NR	15-50	1-2-3
6-chloro-2,3-dihydro-3,3,7-methyl-5H-oxazolo(3,2-a)pyrimidin-5-one	C9H13ClN2O2 Responses: OV-101: I OV-225: NI(WB)51		1.34 /NI(WB)26/I	0.6 NP(WB)3 OV-17: HN(V	- WB)0.4/HX(WB)	NR 4/NI(WB)3	NR 6/NP(WB)	6-15-50	1-2-3
6-chloro-2,3-dihydro-7-hydroxy= methyl-3,3-methyl-5H-oxazolo= (3,2-a) pyrimidin-5-one	C9H13CIN2O3 Responses: OV-101: I	0.86 HN(WB)4/H	- HX(WB)11/N	1.55 II(WB)28/NP(WB)17	- OV-17: HN(WB)3,	NR /HX(WB)1	NR 7/NI(WB)	6-15-50 19/NP(WB)1	1-2-3 2
6-chloronicotinic acid*	C6H4NO2Cl Responses: DEGS: H	- - HX40/NI11/	- - 'NP66	-	-	NR	NR	6-15-50	1-2-3
8-monohydromirex	C10HCl11 Responses: OV-101: 1	3.74 NI5	-	-	-	С	-	6	-
acephate	C4H10NO3PS Responses: OV-101: I	0.15 FP(WB)0.9/I	0.64 NP3 OV-17: I	0.19 FP(WB)0.6 OV-225: FP	C 5	-	-	-	-
acetochlor	C14H20NO2Cl Responses: OV-101: I	0.75 HX5/NI9/N	0.88 P5 OV-17: N	0.67 I5 OV-225: NI5	\mathbf{C}	С#	P	50	3
acifluorfen	C14H7CIF3NO3 Responses: OV-101: I OV-225: NI(WB)3		1.47 /HX(WB)98	0.88 0/NI(WB)40/NP(WB)2	- 270 OV-17: HN(V	NR VB)48/HX(NR WB)390/N	6-15-50 I(WB)27/NI	1-2-3 P(WB) 1000
acrinathrin	C26H21F6NO5 Responses: OV-101: N	10.4 NI15/NP125	12.8 OV-17: NI25	8.9 5/NP100 OV-225: NI40	V	V	V #	15	2

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c		Reco	overies		
e	Formula	OV-101	OV-225	OV-17	302	303	304	50 6 50 6-15 15+50 15 6	CH ₂ C
ılor	C14H2OClNO2 Responses: OV-10	0.8 01: NI(WB)7 OV	1 7-17: NI6 OV	0.72 -225: NI6	С	C	С#	50	3
n	C12H8Cl6 Responses: OV-10	1.05 01: TR0.8 OV-17	0.58 : NI1	0.76	С	С	С	6	1
nrin	C19H26O3 Responses: OV-10	1.36 01: NI8	1.22	-	-	С	C#	50	3
ochlor	C8H12CINO Responses: OV-10	0.09 01: TR5	-	-	С	NR	-	6-15	1-2-3
a-cypermethrin	C22H19Cl2O3N Responses: OV-10	14 01: HX9/NI22	-	-	С	С	-	-	2
ryn	C9H17N5S Responses:	0.77	1.1	-	С	-	-	-	-
ocarb	C11H16N2O2 Responses: OV-10	0.56 01: NP10	-	-	С	-	-	-	-
raz	C19H23N3 Responses:	-	-	-	S	-	-	-	-
zine	C9H5Cl3N4 Responses: OV-10	1.24 01: HX(WB)8/N	1.88 I4 OV-17: NI	1.47 P20	V	S	P	15+50	2+3
ite*	C15H23ClO4S	2	2.77	-	C	P	NR	15	-
		2.14	3.05	-					
	Responses: OV-10	01: FP600/TR100	000						
lor 1016*	CHCl (mix)	0.2	0.24	-	-	\mathbf{C}	\mathbf{C}	6	1
		0.3	0.3	-					
		0.39	0.4	-					
		0.44	0.46	-					
		0.52	0.51	-					
		0.59	0.54	-					
		0.68	0.61	-					
		0.73	0.68	-					
		0.87	0.85	-					
		1	0.9	-					
		1.07	0.98	_				50 6 50 6-15 - - - 15+50	
		1.3	1.09	-					
	Responses:								
	Responses:								

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

Name Aroclor 1221*	Molecular Formula	RRT/c OV-101	RRT/c	RRT/c					
Aroclor 1221*		07-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
	C12H8.8Cl1.2	0.21	_	-	_	С	C	6	1
		0.27	_	-					
		0.32	_	-					
		0.37	_	-					
		0.4	_	-					
		0.53	_	-					
		0.6	0.15	-					
		0.65	0.21	-					
		0.7	0.24	-					
		0.77	0.3	-					
		0.9	0.4	-					
		1.01	0.43	-					
		1.3	0.46	-					
		1.45	0.5	-					
		1.55	0.54	-					
		1.8	0.61	-					
		1.9	0.68	-					
		2.12	0.92	-					
		2.26	1.04	-					
		2.7	1.16	-					
		3.16	1.24	-					
	Responses: OV-	101: TR40							
Aroclor 1242*	C12H7Cl3	0.4	0.24	-	-	C	\mathbf{C}	6	1
		0.52	0.3	-					
		0.58	0.4	-					
		0.68	0.46	-					
		0.73	0.54	-					
		0.88	0.61	-					
		0.98	0.68	-					
		1.05	0.85	-					
		1.24	0.9	-					
		1.42	0.98	-					
		1.52	1.1	-					
		1.77	1.36	-					
		1.87	1.59	-					
		2.24	1.75	-					
		2.61	2.01	-					
	Responses: OV-								

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	c RRT/c		Recoveries						
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ C			
Aroclor 1248*	C12H6.1Cl3.9	0.52	0.4	-	-	\mathbf{C}	C	6	1			
		0.58	0.47	-								
		0.68	0.54	-								
		0.82	0.61	-								
		0.87	0.68	-								
		0.98	0.85	-								
		1.05	0.9	-								
		1.25	0.98	-								
		1.42	1.1	-								
		1.52	1.18	-								
		1.77	1.37	-								
		1.88	1.6	-								
		2.24	1.75	-								
		2.59	2.01	-								
	n ovi	3.1	2.72	-								
	Responses: OV-1	01: 1K50										
Aroclor 1254*	C12H5Cl5	-	-	0.35	-	\mathbf{C}	\mathbf{C}	6	1			
		0.89	0.68	0.48								
		1	0.85	0.63								
		1.07	0.9	0.81								
		1.3	0.99	0.97								
		1.55	1.1	1.3								
		1.82	1.17	1.43								
		1.92	1.39	1.84								
		2.24	1.48	1.98								
		2.68	1.6	2.26								
		3.14	1.75	2.55								
		3.7	2.03	2.91								
		4.2	2.46	3.3								
		4.4	2.79 3.8	4.3								
		5 5.9	3.6 4.3	4.8 5.2								
	Responses: OV-1		4.3	5.2								
	-											
Aroclor 1260*	C12H3.7Cl6.3	-	1.09	-	-	\mathbf{C}	\mathbf{C}	6	1			
		1.31	1.17	-								
		1.53	1.61	-								
		1.9	1.81	-								
		2.11	2.06	-								
		2.25	2.18	-								
		2.68	2.45	-								
		2.9	2.76	-								

APPENDIX I

Appendix I:	PESTDATA	Chemicals	s in Orde	r by C	Chemical	Name ((continued)	J
-------------	----------	-----------	-----------	--------	----------	--------	-------------	---

	Molecular	RRT/c	RRT/c	RRT/c		Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ C		
Aroclor 1260* (cont'd)		3.2	3.12	-							
, ,		3.6	3.48	-							
		4.2	3.7	-							
		5	4.3	-							
		5.9	5.2	-							
		6.6	5.8	-							
		8	7.2	-							
		9.3	8.8	-							
	Responses: OV-1	101: TR20									
Aroclor 1262*	C12H3.3Cl6.7	1.29	-	-	-	C	\mathbf{C}	6	1		
		1.53	-	-							
		1.89	-	-							
		2.11	-	-							
		2.26	-	-							
		2.66	-	-							
		2.88	-	-							
		3.12	-	-							
		3.6	-	-							
		4.2	-	-							
		5	-	-							
		5.9	-	-							
		6.5	-	-							
		6.7	-	-							
		8	-	-							
		9.3	-	-							
	Responses: OV-1	101: TR20									
Aroclor 1268*	C12H1Cl9	3.8	-	-	-	C	-	6	-		
		4.7	-	-							
		5.4	-	-							
		7.3	-	-							
		8.7	-	-							
		10	-	-							
		13	-	-							
		16.2	-	-							
	Responses: OV-1	101: NI40									
Aroclor 4465*	CHCl (MIX)	2.08	-	-	-	C	C	6	1		
		2.22	-	-							
		2.67	-	-							
		2.88	-	-							
		3.11	_	-							

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c		Rec	overies		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ C
Aroclor 4465* (cont'd)		3.6	-	-					
		4.2	-	-					
		4.5	-	-					
		5	-	-					
		5.4	-	-					
		5.9	-	-					
		6.5 6.6	-	-					
		8	-	_					
		9.3	-	-					
		12.1	_	-					
	Responses: OV-101								
atrazine	C8H14ClN5 Responses: OV-101	0.43 : TI58/TR200	0.74 OV-17: NI20	0.44	C	S#	NR	50	1-2-3
azafenidin	C15H13Cl2N3O2 Responses: OV-101	14 :NI(WB)90	-	-	V	-	-	-	-
azinphos-ethyl	C12H16N3O3PS2 Responses: OV-101	6.9 : TI58/TR200	- OV-17: FP(V	14.8 /B)26/NI20	\mathbf{C}	P	S	50	3
azinphos-methyl	C10H12N3O3PS2 Responses: OV-101	5.2 : TI30/TR50	-	11.8	C	NR	NR	6-15-50	1-2-3
azinphos-methyl oxygen analog	C10H12N3O4PS Responses: OV-101	3.7 : FP20 OV-17:	- FP(WB)42	10.1	C	-	-	-	-
benazolin methyl ester	C9H6O3SNCl Responses: OV-101	0.99 : NI1	-	-	-	-	-	-	-
bendiocarb	C11H13NO4 Responses: DEGS:	0.32 NP13	-	-	C	-	-	-	-
benfluralin	C13H16F3N3O4 Responses: OV-101	0.37 : HX(WB)1.5/	0.28 NI(WB)2 O	0.18 V-17: HX(WB)1 OV-22	C 25: NI2	С	С	6	2
benodanil	C13H10INO Responses: OV-101	2.43 : NP60	-	4.5	C	-	-	-	-
benoxacor	C11H11Cl2NO2 Responses: OV-101	0.64 : NI1/NP6 OV	1.06 V-17: NI1/NP	0.7 7 OV-225: NI2	C	P	С	15+50	2+3
bensulide	C14H24NO4PS3 Responses: OV-101	9.5 : FP100/NI(W	- B)9/TI190 (20.2 DV-17: FP100	C	P	C	50	3

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
benzoylprop-ethyl	C18H17Cl2NO3 Responses: OV-10	4.3 1: NI(WB)3 O	8.4 V-17: NI8 OV	6 7-225: NI6	P	NR	NR	6-15-50	1-2-3
BHC, alpha-	C6H6Cl6 Responses: OV-10	0.4 1: TR0.4 OV-17	0.48 7: NI0.3	0.35	С	С	С	6	1
BHC, beta-	C6H6Cl6 Responses: OV-10	0.43 1: TR2 OV-17:	1.62 NI1	0.56	С	С	С	6	1
BHC, delta-	C6H6Cl6 Responses: OV-10	0.5 1: HX0.5/TR0.	1.71 4 OV-17: NI0	0.67	С	С	С	6+15	1
bifenox	C12H9Cl2NO5 Responses: OV-10	5 1: HX16/NI4	14.9	8.8	С	С	P	15+50	2+3
bifenthrin	C23H22ClF3O2 Responses: OV-10	4.9 1: NI8 OV-17: 1	3.8 HX5/HX(WI	4.5 3)20	V	С	-	6+15	2
binapacryl	C15H18N2O6 Responses: OV-10	2.19 1: NI(WB)1 O	4.2 V-17: NI22/N	2.38 P(WB)100	С	P	P	15	-
bis(2-ethylhexyl) phthalate	C24H38O4 Responses: OV-10	6.4 1: NI(V)200	4.5	6.1	-	С	С	15+50	-
bis(trichloromethyl)disulfide	C2Cl6S2 Responses:	0.19	-	-	-	R	-	6	-
bitertanol*	C20H23N3O2 Responses: OV-1	9.4 9.7 7: NP(WB)200	-	11.8 12.5	C	-	-	-	-
bromacil	C9H13BrN2O2 Responses: OV-10	0.8 1: HN(WB)2/N	4.8 NI(WB)2/NP	1.36 (WB)17 OV-17: HN	C N(WB)1/HX(WB)8/N	NR I(WB)6/NI	NR P(WB)5 O	6-15-50 V-225: NI(WE	1-2-3 3)12
bromacil methyl ether	C10H16BrN2O2 Responses: OV-10	0.8 1: HN(WB)1.2/	2.1 /HX(WB)90/	- 'NI(WB)1.5/NP(W	- B)10 OV-225: NI(WB)	- 13.8	-	-	-
bromofenoxim methyl ether	C14H9Br2O6N3 Responses: OV-10	0.3 1: HN(WB)6/N	- NI1	-	-	-	-	-	-
bromophos	C8H8BrCl2O3PS Responses: OV-10	1.11 1: FP3/NI(WB)	1.29 1/TI3 OV-1	1.16 7: FP3/NI2 OV-225	C 5: NI6	С	С	6	-
bromophos-ethyl	C10H12BrCl2O3PS Responses: OV-10	1.51 1: FP3/NI3/TI	1.42 4 OV-17: FP(1.45 WB)0.3	С	С	P	6	-
bromopropylate	C17H16Br2O3 Responses: OV-10	4.4 1: TR12	6.5	-	С	С#	С#	15+50	1-2-3

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

		RRT/c		c RRT/c					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
bromoxynil butyrate	C11H9Br2NO2 Responses: OV-101	0.78 l: NI0.5/NP7.5	-	-	-	V	-	15+50	2
bromoxynil methyl ether	C8H5BR2ON Responses: OV-101	0.3 1: NI0.4	-	-	-	-	-	-	-
bromoxynil octanoate	C15H17Br2NO2 Responses: OV-101	3.14 1: NI4/NP40	-	-	-	V #	-	15+50	2
BTS 27271-HCl	C10H14N2•HCl Responses:	-	-	-	-	-	-	-	-
BTS 27919	C9H11NO Responses:	-	-	-	C	-	-	-	-
bufencarb*	C13H19NO2	- - -	- - -	- -	-	-	-	-	-
	Responses:	-	-	- -					
	-								
Bulan	C16H15Cl2NO2 Responses: OV-101	3.06 1: NI(WB)1 O	7.5 V-17: NI5 OV	4.4 7-225: NI6	С	P	P	15	2
bupirimate	C13H24N4SO3 Responses: OV-103	2 1: FS(WB)20/N	3.7 NI(WB)8 OV-	2.6 17: NP(WB)300	C	-	-	-	-
butachlor	C17H26ClNO2 Responses: OV-101	1.73 1: HX9 OV-17:	1.83 HX9 OV-22	1.46 5: NI14	С	C	-	50	-
butralin	C14H21N3O4 Responses: OV-101	1.15 1: NI7/NP3 O	1.22 V-17: NI6/NI	0.93 215 OV-225: NI8	V	С	-	6+15+50	-
butyl benzyl phthalate	C19H20O4 Responses: OV-101	3.06 1: NI35	5.1	4.5	-	С	P	15+50	-
butylate	C11H23NOS Responses:	0.22	-	-	-	-	-	-	-
butylisodecyl phthalate	C22H34O4 Responses:	-	-	0.82	-	-	-	-	-
cadusafos	C10H23O2PS2 Responses: OV-101	0.37 1: FP(WB)0.5	0.27 OV-17: FP(W	0.29 B)0.4/NI(WB)12/NP(V	C VB)0.5 OV-225: F	NR P(WB)1	NR	6-15-50	1-2-3
captafol	C10H9Cl4NO2S Responses: OV-101	3.11 1: NI3 OV-17: 1	- NI5	5.4	C	P	-	50	3

	Molecular	RRT/c	RRT/c	RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
captan	C9H8Cl3NO2S Responses: OV-101: T	1.2 R2 OV-17:	3.49 NI2	1.85	С	P	С	50	3	
carbaryl	C12H11NO2 Responses: OV-101: N	0.75 IP60	-	1.05	С	-	-	-	-	
carbetamide	C12H16N2O3 Responses:	0.96	-	1.32	-	-	-	-	-	
carbofuran	C12H15NO3 Responses:	0.39	-	-	С	-	-	-	-	
carbofuran-3-keto-7-phenol	C10H10O3 Responses:	-	0.24	-	-	-	-	-	-	
carbofuran-7-phenol-DNP ether	C16H14N2O6 Responses:	-	18.1	-	-	-	-	-	-	
carbophenothion	C11H16ClO2PS3 Responses: OV-101: T	2.94 T15/TR4 C	4.2 OV-17: FP8	3.7	С	С	P	6	2	
carbophenothion oxygen analog	C11H16ClO3PS2 Responses: OV-101: N	2.17 N6/TI15 O	4.2 V-17: FP15	3.06	С	NR	NR	6-15-50	1-2-3	
carbophenothion oxygen analog sulfone	C11H16ClO5PS2 Responses: OV-101: N	3.8 II36/TI35 (- OV-17: FP(WI	7.1 3)24	-	-	-	-	-	
carbophenothion oxygen analog sulfoxide	C11H16ClO4PS2 Responses: OV-101: T	4.2 1250 OV-17	- 7: FP15	2.87	-	-	-	-	-	
carbophenothion sulfone	C11H16ClO4PS3 Responses: OV-101: F	5.1 P3/TI20 O	- V-17: FP30	9.2	С	С	P	6	1	
carbophenothion sulfoxide	C11H16ClO3PS3 Responses: OV-101: F	5.4 P3/TI35 O	- V-17: FP20	4	-	-	-	-	-	
carbosulfan	C20H32N2O3S Responses: OV-101: N	5.4 JP20	-	5.3	P	-	-	-	-	
carboxin	C12H13NO2S Responses: OV-101: F	1.87 S50	-	-	С	NR	NR	6-15-50	-	
carboxin sulfoxide	C12H13NO3S Responses: OV-101: F	0.13 S10 OV-17:	0.23 FS30 OV-22	0.11 5: FS25	-	NR	NR	6-15-50	1-2-3	
CGA 100255	C15H12NO5 Responses: OV-101: N	1.8 IP100 OV-1	- 7: NI1000/N	2.96 P150	S	-	-	-	-	

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c		Rece	overies		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
CGA 118244	C15H13Cl2N3O3 Responses: OV-10	7 1: NI40	-	11.4	V	NR	NR	6-15-50	1-2-3
CGA 120844	C8H9NSO3 Responses: OV-10	0.6 1: NI200/NP20	2.65 0 OV-17: NI1	0.9 00/NP300 OV-225: NI3	- 00	NR	NR	6-15-50	1-2-3
CGA 14128	C12H21N2O4PS Responses: OV-10	0.75 1: NI2/NP2 OV	0.8 V-17: NI0.6/N	0.68 IP2 OV-225: NI2 D	С		-	50	1-2-3
CGA 150829	C5H14N4O Responses: OV-10	0.22 1: NP0.5 OV-17	- 7: NP1	0.14	V	-	-	-	-
CGA 171683	C6H5F4N3O2 Responses: OV-10	0.06 1: NI30 OV-17:	0.08 NI10 OV-22	0.04 5: NI40	С		-	15+50	3
CGA 189138	C13H8O3Cl2 Responses: OV-10	1.39 1: NI1000 OV-1	1.89 17: NI1000 O	1.54 V-225: NI1000	-	-	-	-	-
CGA 205374	C16H11N3O2Cl2 Responses: OV-10	12 1: NI50 OV-17:	8.9 NI200 OV-2	6.1 25: NI500	-	NR	NR	6-15-50	1-2-3
CGA 205375	C16H13N3O2Cl2 Responses: OV-10	6.7 1: NI1000 OV-1	- 17: NI1000	1.59	-	-	-	-	-
CGA 236431	C8H7F3N2O2 Responses: OV-10	0.17 1: NP200 OV-1	- 7: NP20	0.11	-	-	-	-	-
CGA 236432	C9H9F3N2O2 Responses: OV-10	0.26 1: NP20 OV-17	- : NP8	0.13	-	-	-	-	-
CGA 27092	C8H7F3N2O Responses: OV-1	- 7: NP50	-	0.62	-	-	-	-	-
CGA 37734	C10H13NO2 Responses: OV-10	0.4 1: NP(V)20 OV	- V-17: NP100	0.47	С	NR	NR	6-15-50	1-2-3
CGA 51702	C9H9F3N2O Responses: OV-10	0.46 1: NP2 OV-17:	- NP3	0.49	-	-	-	-	-
CGA 72903	C7H6F3N Responses: OV-10	0.22 1: NP100 OV-1	- 7: NP50	0.14	-	-	-	-	-
CGA 91305	C10H8Cl2N3O Responses: OV-10	1.15 1: NI3	4.3	1.54	V	NR	NR	6-15-50	1-2-3
CGA 94689A	C15H21NO5 Responses: OV-10	1.53	6.5	2.41	V	NR	NR	6-15-50	1-2-3

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
CGA 94689B	C15H21NO5	1.54	6.6	2.45	S	NR	NR	6-15-50	1-2-3
	Responses: OV-10	1: NI12/NP150	OV-17: NI10	O/NP75 OV-225: NI8					
chloramben methyl ester	C8H7Cl2NO2 Responses: OV-10	0.44 01: HX0.8/NI0.8	1.03	-	-	-	-	-	-
chlorbenside	C13H10Cl2S Responses: OV-10	1.39 1: NI6 OV-17: I	1.62 HX3/NI1	1.54	С	S	P	6	1
chlorbromuron	C9H10BrClN2O2 Responses: OV-10	1.27 01: HX12/NI19	3.39	1.42	V	V	V	50	3
chlorbufam	C11H10CINO2 Responses: OV-10	0.42 01: HX4 OV-17:	0.75 HN(WB)0.4	0.45	С		-	15	2+3
chlordane*	C10H6Cl8	0.45 0.63	0.16 0.5	-	С	С	С	6	1
		0.73 0.81 0.97	0.52 0.85 0.9	0.23 0.53					
		1.16	1.45 1.54	0.61 0.88					
		1.45 1.62	2.69	1.33					
	Responses: OV-10	2.61	3.33	1.47 N 995: NIA					
	•				_	_	_	_	_
chlordane, cis-	C10H6Cl8 Responses: OV-10	1.66 1: TR1 OV-17:	1.54 NI0.8	1.48	С	С	С	6	1
chlordane, trans-	C10H6Cl8 Responses: OV-10	1.49 01: TR1 OV-17:	1.46 NI0.6	1.34	C	С	С	6	1
chlordecone	C10H8Cl10O5 Responses: OV-10	2.75 1: NI(WB)2 OV	1.67 V-17: HX2/N	2.38 I5 OV-225: NI6	-	S #	P #	15+50	1-2-3
chlordene	C10H6Cl6 Responses: OV-10	0.56 01: NI(WB)1 OV	0.4 V-17: NI0.4 (0.32 OV-225: NI0.3	-	С	С	6	1
chlordene epoxide	C10H6Cl6O Responses: OV-10	0.84 01: NI0.6	0.65	-	-	С	-	15	-
chlordene, alpha-	C10H6Cl6 Responses: OV-10	0.82 01: TR2 OV-17:	0.64 NI0.6	0.67	-	-	-	-	-
chlordene, beta-	C10H6Cl6 Responses: OV-10	0.98 01: TR1 OV-17:	0.84 NI1	0.89	-	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

		RRT/c	RRT/c RRT/c						
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
chlordene, gamma-	C10H6Cl6 Responses: OV-101	0.98 : TR2 OV-17:	0.89 NI1 OV-225:	0.88 NI1	-	-	-	-	-
chlorethoxyfos	C6H11Cl4O3PS Responses: OV-101	0.33 : FP0.5/HX0.3	0.23 3/NI0.5 OV-1	0.24 17: FP0.5/HX0.3/NI	V 0.3 OV-225: FP0.5/N	C NI0.3	-	6	1
chlorfenapyr (prop)	C15H11BrClF3N2O Responses: OV-101	2.21 : NI2/NP50 C	- OV-17: NI2/N	2.34 P50 DEGS: NI4/NP	P 2190	-	S	50	2
chlorfenvinphos, alpha-	C12H14Cl3O4P Responses: OV-101	1.21 : FP10/FP(WE	1.58 3)1.7/NI(WB	1.29)2/TI4 OV-17: FP(V	C VB)2/NI3 OV-225: N	- NI5	NR	6-15-50	-
chlorfenvinphos, beta-	C12H14Cl3O4P Responses: OV-101	1.29 : FP2/FP(WB)	2 1.8/HX3/NI	1.52 (WB)2/TI4 OV-17:	C FP4/FP(WB)2/NI3	S # OV-225: FP	- 4/NI5	50	1-2-3
chlorflurecol methyl ester	C15H11ClO3 Responses: OV-101	1.73 : HX8/NI3	-	1.88	C	-	-	-	-
chlorimuron ethyl ester	C15H15ClN4O6S Responses: OV-101	0.13 : NI14/NI(WE	0.15 3)24/NP35 C	0.1 OV-17: NI(WB)1.4/N	P IP23	NR	-	-	-
chlormephos	C5H12ClO2PS2 Responses: OV-17	- : FP0.4	-	0.11	C	-	-	-	-
chlornitrofen	C12H6Cl3NO3 Responses: OV-101	2.85 : TR5	4.7	-	C	С	С	6+15	2
chlorobenzilate	C16H14Cl2O3 Responses: OV-101	2.31 : TR70 OV-17	3.26 : NI15	2.61	C	С#	P #	15+50	3
chloroneb	C8H8Cl2O2 Responses: OV-101	0.19 : NI3.5	0.19	-	C	С	-	6	2
chloropropylate	C17H16Cl2O3 Responses: OV-101	2.33 : TR80 OV-17	2.9 : NI15	2.41	P	С	С	15+50	3
chlorothalonil	C8Cl4N2 Responses: OV-101	0.55 : HX1/NI0.6	1.44 OV-17: HX1/	0.74 NI2	S	С#	C#	6-15-50	2+3
chlorothalonil trichloro impurity	C8HCl3N2 Responses:	0.32	-	-	R	R #	NR	6-15-50	2+3
chloroxuron	C15H15ClN2O2 Responses: OV-101	0.81 : HX16/NI300	0.85	-	C	NR	NR	6-15-50	1-2-3
chlorpropham	C10H12ClNO2 Responses: OV-101	0.32 : HX2 OV-17:	0.43 NI80	0.25	C	C	С	15	2

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
chlorpyrifos	C9H11Cl3NO3PS Responses: OV-101	1 : NI1.5/TI3 O	1 V-17: FP2/N	1 I2	С	C	P	6	2
chlorpyrifos oxygen analog	C9H11Cl3NO4P Responses: OV-101	0.95 : FP27/NI6/T	1.51 18	1.08	С	NR	-	6-15-50	-
chlorpyrifos-methyl	C7H7Cl3NO3PS Responses: OV-101	0.72 : FP1/FP(WB)	0.86 1.3/HX1.5/I	0.79 NI1/NP1 OV-17: FP(WB)1.5	C	С	-	6	2
chlorsulfuron	C12H12ClN5O4S Responses: OV-101	1.3 : NI50	8.9	-	-	NR	NR	6-15-50	-
chlorthiamid	C7H5Cl2NS Responses:	0.69	-	-	-	-	-	-	-
chlorthiophos oxygen analog	C11H15Cl2O4PS Responses: OV-101	2.22 : HX9/NI6 O	4.1 V-17: FP10/F	2.99 HX11 OV-225: FP6	С	NR	NR	6-15-50	1-2-3
chlorthiophos sulfone	C11H15Cl2O5PS2 Responses: OV-101	5.3 : HX20/NI9 (18.8 OV-17: FP100	9.1 /HX22 OV-225: FP39	С	С	-	50	3
chlorthiophos sulfoxide	C11H15Cl2O4PS2 Responses: OV-101	4.7 : HX20/NI6 (10.3 OV-17: FP25/	6.9 HX17 OV-225: FP15	С	NR	NR	6-15-50	1-2-3
chlorthiophos*	C11H15Cl2O3PS2	2.24 2.36 2.56	- -	2.58 2.77 3.16	С	С	С	6	2
	Responses: OV-101		P5						
CL 202,347	C13H19N3O5 Responses: OV-101	2.96 : NI15/NP50	11.5 OV-17: NI20,	4.1 /NP100 OV-225: NI60	-	-	-	-	-
clodinafop-propargyl	C17H13ClFNO4 Responses: OV-101	3.26 :NP(WB)30 O	5.8 V-17:NI(WB)	4.67 20 OV-225:NI(WB)5	V	V	-	50	3
clofentezine	C14H8Cl2N4 Responses: OV-101	5.9 : HN(WB)10.5	- /HX20/NI1	9.8 00 OV-17: NP165	R	S	-	15	2
clomazone	C12H14ClNO2 Responses: OV-101	0.45 : HX1.5/HX2	0.59 /NI110 OV-1	0.46 17: HX2/NP11 OV-225: NI15	C		-	50	3
clopyralid methyl ester	C7H4Cl2NO2 Responses: OV-101	0.18 : NI0.25	-	-	-		-	50	-
cloquintocet-mexyl	C18H22ClNO3 Responses: OV-101	4.8 :NP(WB)40 O	6.6 V-17:NI(WB)	6.3 20 OV-225:NI(WB)5	V	NR	-	6-15-50	1-2-3

Appendix I-21

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
Compound K*	C10H6Cl8 Responses: OV-101	0.83 2.53 1: TR5	2.66	-	-	С	-	-	1	
coumaphos	C14H16ClO5PS	9	40 OV-17: FP50	18 /FP(WB)26/NI38/N	C P34 OV-225: NI100	NR	С#	6-15-50	3	
coumaphos oxygen analog	C14H16ClO6P Responses: OV-101	8 l: NI200/NP13	45 0 OV-17: FP7	16 75/NI50/NP40 OV-2	C 225: NI150	NR	NR	6-15-50	1-2-3	
CP 108064, methylated	C15H21NO4 Responses: OV-101	0.73 l: NP6 OV-17:	- NP6	0.67	-	-	-	-	-	
CP 51214	C14H21NO3 Responses: OV-101	0.7 l: NP13 OV-17	- : NP24	0.58	С	NR	NR	6-15-50	1-2-3	
crotoxyphos	C14H19O6P Responses: OV-101	1.37 l: NI60/TI10 (2.85 OV-17: FP10/	1.9 FP(WB)3	С	NR	NR	6-15-50	1-2-3	
crufomate	C12H19ClNO3P Responses: OV-101	1.08 l: TI6 OV-17: F	2.33 FP2/NI3	1.3	С	NR	NR	6-15-50	-	
cyanazine	C9H13ClN6 Responses: OV-101	0.89 l: NI4/TI26 O	4.9 V-17: HX6	1.48	С	NR	-	6-15-50	-	
cyanofenphos	C15H14NO2PS Responses: OV-101	3.1 l: FP3.5/NI3/N	8.2 VP(WB)3	4.6	С	-	-	-	-	
cyanophos	C9H10O3NSP Responses: OV-101	0.47 l: FP(WB)0.7/1	- NI(WB)2/NP	0.59 1 OV-17: FP(WB)0.7	C 7/NP(WB)1	-	-	-	-	
cyclanilide methyl ester	C12H11Cl2NO3 Responses: OV-101	1.57 l: NI5/NP30 C	1.84 OV-17: NI6/N	1.64 P30 OV-225: NI6	-	-	-	-	-	
cycloate	C11H21NOS Responses: OV-101	0.3 1: FS2/NP15	-	-	\mathbf{C}	V #	S	15+50	3	
cyfluthrin*	C22H18Cl2FNO3 Responses: OV-101	11.7 12.5 12.8 1: HX30/NI30	- - -	- - -	С	P	-	15	-	
cymiazole	C12H14N2S Responses: OV-101	0.73	- NP(WB)2	0.89	-	-	-	-	-	
cymoxanil	C7H10N4O3	0.25	0.5	0.16	V	NR	NR	6-15-50	1-2-3	

		RRT/c	RRT/c RRT/c RRT/c		Recoveries				
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
cypermethrin*	C22H19Cl2NO3	-	29	-	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
		14.1	33	23					
		15.1	36	25					
	Responses: OV-10	01: NI90							
cyprazine	C9H14ClN5 Responses: OV-10	0.64 01: HX1.5/NI13	1.22	0.74	С	-	-	-	-
cyproconazole	C15H18ClN3O Responses: OV-10	2.04 1: HN(WB)182	1.61 /HX(WB)73	2.69 /NI(WB)72/NP(WB)1	C 2	NR	NR	6-15-50	1-2-3
cyprodinil	C14H15N3 Responses: OV-10	1.18 01: NP(WB)2 O	- V-17: NP(WB	1.39 3)10	C	NR	NR	6-15-50	1-2-3
cyromazine	C6H10N6 Responses: OV-10	0.58 1: NP10 OV-17	- : NP2	0.68	S	-	-	-	-
dazomet	C5H10N2S2 Responses: OV-10	0.4 01: HX500/NI30	- 00 OV-17: FS	0.71 (WB)80/HN(WB)0.4/	S HX500/NI300	NR	-	6-15-50	1-2-3
DCPA	C10H6Cl4O4 Responses: OV-10	1.06 1: NI1 OV-17: 1	1.13 NI1 OV-225:	1 NI1	C	C	С	15	2
DDE, o,p'-	C14H8Cl4 Responses: OV-10	1.55 1: TR2 OV-17:	1.28 NI1	1.51	C	C	С	6	1
DDE, p,p'-	C14H8Cl4 Responses: OV-10	1.92 1: NI1.5 OV-17	1.59 : NI1	1.86	C	С	С	6	1
DDM	C13H10Cl2 Responses:	0.72	-	-	-	-	-	-	-
DDMS	C14H11Cl3 Responses:	1.65	-	1.65	-	R	-	6	-
DDMU	C14H9Cl3 Responses:	1.47	-	-	-	-	-	-	-
DDNS	C14H12Cl2 Responses:	0.83	-	-	-	-	-	-	-
DDNU	C14H10Cl2 Responses:	0.83	-	-	-	-	-	-	-
DDT, o,p'-	C14H9Cl5 Responses: OV-10	2.55 1: TR4 OV-17:	2.27 NI2	2.7	С	C	C	6	1

Appendix I–23

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
DDT, p,p'-	C14H9Cl5 Responses: OV-101:	3.13 TR4 OV-17:	3.6 NI2	3.5	С	С	С	6	1	
deltamethrin*	C22H19Br2NO3	17.1	-	21	\mathbf{C}	S#	P	15	2	
		27	-	35						
		29	19.9	38						
	Responses: OV-101:	NI1300								
deltamethrin, trans-*	C22H19Br2NO3	17	-	6.2	-	P#	NR	15	2	
		29	-	20						
		31	19.7	38						
	Responses: OV-101:	NI200								
demeton-O oxygen analog	C8H19O4PS Responses: OV-101:	0.22 TI6_OV-17: F	0.32	0.21	-	-	-	-	-	
-1*	•	110 07-17.1		0.99	C					
demeton-O sulfone*	C8H19O5PS2	0.71	- 2.95	0.28 0.96	С	-	-	-	-	
	Responses: OV-101:			0.90						
demeton-O sulfoxide	C8H15O4PS2	0.87	-	1.05	C	_	_	_	_	
	Responses: OV-101:									
demeton-O*	C8H19O3PS2	-	-	0.2	\mathbf{C}	NR	-	6-15	-	
		0.28	-	0.36						
	Responses: OV-101:	FP(WB)2 OV	V-17: FP2							
demeton-S	C8H19O3PS2	0.41	0.56	0.41	С	NR	-	6-15-50	_	
	Responses: OV-101:	FP(WB)0.8/7	ΓΙ2 OV-17: F	P0.8/FP(WB)0.8						
demeton-S sulfone	C8H19O5PS2	1.15	5.8	1.75	С	-	-	-	_	
	Responses: OV-101:	FP40/TI20 C	OV-17: FP5 C	V-225: FP60						
demeton-S sulfoxide	C8H19O4PS2	_	_	_	С	_	_	_	_	
demeton o sunoxide	Responses: DEGS:	FP30			G					
des N-isopropyl isofenphos	C12H18NO4PS	1.21	2.73	1.5	\mathbf{C}	S		50		
des N-isopropyi isorempilos	Responses: OV-101:			1.5	C	3	-	50	-	
des N-isopropyl isofenphos oxygen	C12H18NO5P	0.93	-	1.43	-	-	-	-	-	
analog	Responses: OV-101:	FP(WB)5 OV	V-17: FP(WB)	12						
desdiethyl simazine	C3H4ClN5	0.2	0.86	0.61	-	NR	NR	6-15-50	1-2-3	
	Responses: OV-101:	$\rm HX25/NI20$	OV-17: HN(WB) 0.1/HX25 OV-225: NI20						
desethyl simazine	C5H8ClN5	0.3	0.8	0.53	_	NR	NR	50	1-2-3	
				WB)0.1/HX12 OV-225: NI80					0	

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

		RRT/c	RT/c RRT/c		Recoveries				
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
desisopropyl iprodione	C10H6Cl2N3O3 Responses: OV-101	2.31 : NI20/NP50	15	3.93	P		-	50	1-2-3
desmedipham	C16H16N2O4 Responses: OV-101	0.44 : NI1000/NP3	0.29 00 OV-17: N	0.45 I1000/NP218 OV-22	- 25: NI1000	-	-	-	-
desmethyl diphenamid	C15H15NO Responses: OV-101	0.98 : TI340	-	-	-	-	-	-	-
desmethyl norflurazon	C11H7ClF3N3O Responses: OV-101	3.38 : HX(WB)3/N	1.41 II27 OV-17: I	4.9 HX(WB)3 OV-225: N	V NI200	NR	NR	6-15-50	1-2-3
di-allate	C10H17ClNOS Responses:	0.42	0.26	0.33	C	С	-	6	-
di-n-octyl phthalate	C24H38O4 Responses: OV-101	12 : NI(V)330	-	-	-	С	С	15+50	-
dialifor	C14H17ClNO4PS2 Responses: OV-101	6.5 : TI30/TR28	- OV-17: FP25 _/	14.3 (FP(WB)31	C	С	P	15	2
diazinon	C12H21N2O3PS Responses: OV-101	0.51 : FP(WB)1/NI	0.4 3/NP0.4 OV	0.44 7-17: FP0.7/FP(WB)	C .9/NI4/NP0.25 OV	C -225: FP6/N	C NI4.5	15	3
diazinon oxygen analog	C12H21N2O4P Responses: OV-101	0.5 : NI18/NP0.6	0.53 OV-17: NI30	0.47 /NP0.6 OV-225: NI6	C	NR	NR	6-15-50	1-2-3
dibromochloropropane	C3H5Br2Cl Responses: OV-101	0.04 : TR0.6 OV-17	- 7: NI0.2	0.03	-	-	-	-	-
dibutyl phthalate	C16H22O4 Responses: OV-101	0.88 : NI30	0.92	0.84	-	С	С	15+50	-
dicamba methyl ester	C8H6Cl2O3 Responses: OV-101	0.19 : HX(WB)1.6/	0.18 NI0.6	-	-	-	-	-	-
dichlobenil	C7H3Cl2N Responses: OV-101	0.11 : TR0.5 OV-17	- 7: NI0.6	0.1	С	P	С	15	2
dichlofenthion	C10H13Cl2O3PS Responses: OV-101	0.67 : FP1/FP(WB)	0.64 3.5/NI1.9/T	0.56 I2 OV-17: FP0.8/ΗΣ	C X(WB)2	С	V	6	2
dichlofluanid	C9H11Cl2FN2O2S2 Responses: OV-101	0.9 : NI1/NP44	1.71	1.01	C	С#	-	15+50	2+3
dichlone	C10H4Cl2O2 Responses: OV-101	0.55 : NI2	0.92	-	P	S #	S #	6-15-50	2+3

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

		RRT/c	RRT/c		Recoveries				
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
dichlorobenzene, p-	C6H4Cl2 Responses: OV-l	0.03 01: TR37 OV-17	- : NI4	0.02	-	С	С	6	1
dichlorobenzophenone, o,p'-	C13H8Cl2O Responses: OV-1	0.82 01: TR4 OV-17:	1.07 NI2	0.92	-	С	С	15	2
dichlorobenzophenone, p,p'-	C13H8Cl2O Responses: OV-1	0.99 01: TR3 OV-17:	1.25 NI2	1.08	-	С	С	15	2
dichlorprop methyl ester	C10H10Cl2O3 Responses: OV-1	0.28 01: HX(WB)1.6/	- /NI2	-	-	-	-	-	-
dichlorvos	C4H7Cl2O4P Responses: OV-1	0.07 01: FP9/NI1/TI	0.08 0.5 OV-17: FI	0.08 P2.5 OV-225: FP(WB)0	C 0.7	NR	NR	6-15-50	1-2-3
diclobutrazol	C15H19Cl2N3O Responses: OV-1	2.02 01: HX7/NI7/N	3.4 P(WB)8 OV-	2.03 17: HN(WB)1.3/HX7/	C /HX4/HX(WB)2/	NR /NI(WB)4/N	NR NP(WB)8	6-15-50 OV-225: NI7	1-2-3
diclofop-methyl	C16H14Cl2O4 Responses: OV-1	3.57 01: HX8/NI10 0	4.9 OV-17: HX10	4.7 OV-225: NI12	С	С	С	15	2
dicloran	C6H4Cl2N2O2 Responses: OV-1	0.42 01: TR0.5 OV-17	0.96 7: NI0.4	0.45	С	S	P	15+50	2+3
dicofol, o,p'-*	C14H9Cl5O	0.86 4.1	1.08	0.91	C	V	S	6+15	2
	Responses: OV-1	01: NI5 OV-17: 1	HX2						
dicofol, p,p'-*	C14H9Cl5O Responses: OV-1	1.04 4.4 01: NI5 OV-17: 1	- 1.28 HX3	1.08	С	V	P #	6+15	1+2
dicrotophos	C8H16NO5P Responses: OV-1	0.31 01: FP(WB)0.6/	0.96 ГПО OV-17:	0.43 FP1/FP(WB)0.8	С	NR	-	6-15-50	-
dieldrin	C12H8Cl6O Responses: OV-1	1.91 01: HX1/NI1.5	1.87 OV-17: HX1.	1.84 5/NI1	C	С	С	15	2
diethatyl-ethyl	C16H22ClNO3 Responses: OV-1	1.78 01: HX11/NI10,	3.14 /NP180 OV-1	2 7: NI11/NP200 OV-22	C 25: NI14	NR	NR	6-15-50	1-2-3
diethyl phthalate	C12H14O4 Responses: OV-1	0.26 01: NI3500	-	-	-	P	P	15+50	-
difenoxuron	C16H18N2O3 Responses: OV-1	0.97 01: HN(WB)5 C	- OV-17: NP16	0.96	-	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

		RRT/c	RRT/c	RRT/c		Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂		
diisobutyl phthalate	C16H2204	0.65	0.61	0.56	-	P	-	15+50	-		
	Responses: OV-101	: NI20									
diisohexyl phthalate*	C20H30O4	2.45	-	-	-	\mathbf{C}	-	15+50	-		
		2.66	-	-							
		2.9	-	-							
		3.27	-	-							
	Responses: OV-101	: TR340									
diisooctyl phthalate*	C24H38O4	0.91	-	-	-	\mathbf{C}	\mathbf{C}	15+50	-		
		5.5	-	-							
		6.2	-	-							
		6.7	-	-							
		7.5	-	-							
		9	-	-							
		10.5	-	-							
	Responses: OV-101	: TR850									
Dilan*	C15.5H14Cl2NO2	-	5.3	-	-	P	P	15	-		
		-	4.8	-							
		2.33	5.8	-							
		2.81	7.5	-							
		3.39	8.2	-							
	Responses: OV-101	: TR8									
dimethachlor	C13H18CINO2	0.71	1.11	0.71	C	-	_	_	-		
	Responses: OV-101	: NI30 OV-17:	NI10 OV-22	5: NI20							
dimethametryn	C11H21N5S	-	_	-	\mathbf{C}	-	_	-	-		
,	Responses:										
dimethenamid	C12H18ClNO2S	0.72	0.98	_	-	NR	NR	6-15-50	1-2-3		
	Responses: OV-101										
dimethipin	C6H10O4S2	0.41	2.71	0.81	С	NR	NR	6-15-50	1-2-3		
amempin	Responses: OV-101				G	1111	111	0 10 00	120		
dimethoate	C5H12NO3PS2	0.4	1.6	0.62	C	NR	NR	6-15-50	1-2-3		
	Responses: OV-101	: FP(WB)0.7/1		1 OV-17: FP0.8/FP(W							
dimethyl phthalate	C10H10O4	0.15	0.15	0.14	-	P	-	6+15+50	-		
, .	Responses: OV-101	: NI300									
dinitramine	C11H13F3N4O4	0.52	0.93	0.44	C	-	P	15	-		
	Responses: OV-101	: NI(WB)1/TI		NI OV-225: NI1							

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
dinobuton	C14H18N2O7	1.4	-	1.32	\mathbf{C}	-	-	-	-	
	Responses: OV-101	1: HN(WB)1.5	OV-17: HN(WB)1/NP(WB)50						
dinocap*	C18H24N2O6	-	-	3.5	C	P	P	15	2	
		4	-	3.9						
		4.3	6.9	4.4						
		4.8	7.7	4.8						
		5.1	9.5	5.6						
	Responses: OV-101	1: NI(WB)6 O	V-17: N1150							
dinoseb methyl ether	C11H14N2O5	0.63	-	-	-	-	-	-	-	
	Responses: OV-101	l: HN1/NI1.2								
dioxabenzofos	C8H9O3PS	0.34	-	0.36	\mathbf{C}	P	-	15	-	
	Responses: OV-17	7: FP0.7								
dioxacarb	C11H13NO4	_	_	-	\mathbf{C}	_	_	_	_	
dioxacuis	Responses:				· ·					
dioxathion	C12H26O6P2S4	0.47	_	0.5	V	NR	_	6-15-50	2	
	Responses: OV-101		OV-17: FP7/		•	1,12		0 10 00	-	
diphenamid	C16H17NO	1.1	_	1.55	V	NR	_	6-15	_	
. F	Responses: OV-17									
diphenylamine	C12H11N	0.29	_	0.25	\mathbf{C}	S	_	6+15	_	
ca.p.n.ca.) administ	Responses:	0.20		0.40	<u> </u>	J		0.10		
disul-Na	C8H7Cl2O5S•Na	0.23		_						
disur-iva	Responses: OV-101		-	-	-	-	-	-	-	
	•									
disulfoton	C8H19O2PS3	0.54	0.6	0.46	С	P #	NR	6	1-2-3	
	Responses: OV-101	l: TI2 OV-17: F	P1							
disulfoton sulfone	C8H19O4PS3	1.5	6.7	2.39	\mathbf{C}	NR	-	6-15-50	-	
	Responses: OV-101	l: TI7 OV-17: I	FP7							
disulfoton sulfoxide	C8H1903PS3	_	_	-	С	_	_	_	_	
and another surround	Responses:				J					
dithianan	C14H4O2N2S2	4.7	£9	11.9	NR					
dithianon	Responses: OV-101	4.7 - NI(WB) 19 C	53 W-17: NP/WI	11.3	NK	-	-	-	-	
	•									
diuron	C9H10Cl2N2O	0.11	0.09	0.11	C	NR	NR	6-15-50	1-2-3	
	Responses: OV-101	1: NI(WB)9 OV	V-17: NI12 O	V-225: NI27						
DNOC methyl ether	C8H8N2O5	0.35	-	-	-	-	-	-	-	
,	Responses: OV-101									

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

		RRT/c	RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
edifenphos	C14H15O2PS2 Responses: OV-102	2.87 l: FP(WB)4/NI	6.3 (WB)4 OV-1	5.3 7: FP(WB)8	С	-	-	-	-
endosulfan I	C9H6Cl6O3S Responses: OV-102	1.64 l: HX1/NI1.3(1.38 OV-17: HX1/	1.47 NI2	С	С	С	15	2
endosulfan II	C9H6Cl6O3S Responses: OV-102	2.21 l: HX2/NI2 O	3.9 V-17: HX3/N	2.77 I2	С	С	С	15+50	2
endosulfan sulfate	C9H6Cl6O4S Responses: OV-102	2.83 l: HX4/TR5 O	8.3 V-17: HX6/N	4 VI6	С	С	С	50	2
endrin	C12H8Cl6O Responses: OV-102	2.13 l: TR2 OV-17: I	2.22 NI2	2.29	C	С#	С#	15	2
endrin alcohol	C12H8Cl6O Responses: OV-102	2.55 l: TR4	-	-	-	P	С	15+50	2+3
endrin aldehyde	C12H8Cl6O Responses: OV-102	2.35 l: TR4	-	-	С	P	С	15+50	-
endrin ketone	C12H8Cl6O Responses: OV-102	3.6 l: TR5	10.3	-	-	С	С	50	2
EPN	C14H14NO4PS Responses: OV-102	4.5 l: NI0.5/TI16 (10.6 OV-17: FP50/	6.9 NI9	С	С	С	15	2
epoxyhexachloronorbornene	C7H2Cl6O Responses:	-	-	0.2	-	-	-	-	-
EPTC	C9H19NOS Responses: OV-102	0.12 l: TI30	-	-	-	P	-	15	-
esfenvalerate	C25H22ClNO3 Responses: OV-102	22.5 l: NI90	-	-	С	С	С	15	2
etaconazole*	C14H15Cl2N3O2 Responses: OV-10	2.36 2.43 1: NP(WB)12 C	- - OV-17: HX7	3.17	С	-	-	-	-
ethalfluralin	C13H14F3N3O4	0.34	0.27	0.19 -17: HX6 OV-225: NI0.4	C	C	С	6	2
ethametsulfuron methyl ester*	C15H18N6O6S	0.35 0.55	2.85 3.6	0.4 0.95	-	NR	NR	6-15-50	1-2-3

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

			Recoveries						
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
ethephon	C2H6ClO3P Responses: OV-10	3.03 01: NI170	2.74	2.88	NR		-	6+15+50	1+2+3
ethiofencarb	C10H15NO2S Responses: OV-10	0.6 01: FP20/FP400/	1.4 /FS1.5/HN(V	0.78 VB)3.5/NI950/NP(V	C WB)4 OV-17: NP133	NR	NR	6-15-50	-
ethiolate	C7H15NOS Responses: OV-10	0.06 01: FS9	-	-	С	-	-	-	-
ethion	C9H22O4P2S4 Responses: OV-10	2.56 01: FP(WB)1.9/1	3.93 NI(WB)3/NP	3.36 2 OV-17: FP4/FP(W	C B)2.3/NI8 OV-225:	C FP2/NI8	С	6	2
ethion oxygen analog	C9H22O5P2S3 Responses: OV-10	1.88 01: NP1	4.1	-	С	-	-	-	-
ethofumesate	C13H18O5S Responses: OV-10	0.86 01: FS32/NI315	1.93 OV-17: FS65	1.02 /NI333 OV-225: FS5	C 66/NI638	-	-	-	-
ethoprop	C8H19O2PS2 Responses: OV-10	0.33 01: FP0.7/TI0.8	0.31 OV-17: FP1	0.25	C	P #	S #	50	1-2-3
ethoxyquin	C14H19N0 Responses: OV-10	0.6 01: NI20/NP15	1.64 OV-17: NI12/	0.7 NP15 OV-225: NI30	C	NR	NR	6-15-50	-
ethyl p-toluene sulfonamide	C9H13NO2S Responses:	-	-	-	C	-	-	-	-
ethylenethiourea	C3H6N2S Responses: OV-10	0.5 01: NI2200/NP2	2.33 3 OV-17: NI4	0.66 500/NP64 OV-225:	S NI6250	NR	NR	6-15-50	1-2-3
etridiazole	C5H5Cl3N2OS Responses: OV-10	0.18 01: NI0.3/NP0.6	0.12 OV-17: HX(0.21 WB)0.8/NI0.4/NP0	C .5 OV-225: NI0.2	С	P	6	2
etrimfos	C10H17N2O4PS Responses: OV-10	0.58 01: FP2/NI50 O	0.59 V-17: NI50 C	0.51 0V-225: NI30	С	С	С	15	2+3
etrimfos oxygen analog	C10H17N2O5P Responses: OV-10	0.51 01: FP7/NI1000/	0.8 /NP(WB)3.5	0.63	C	-	-	-	-
famphur	C10H16NO5PS2 Responses: OV-10	2.65 01: FP8/TI40 O	14 V-17: FP50/F	5 P(WB)7	C	NR	-	6-15-50	-
famphur oxygen analog	C10H16NO6PS Responses: OV-10	2.26 11: FP54 OV-17:	- FP(WB)12	4.4	C	-	-	-	-
fenac	C8H5Cl3O2 Responses: OV-10	1.42 01: NI2800	3.7	-	-	NR	NR	6-15-50	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c RRT/c RRT/c		Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
fenac methyl ester	C9H7Cl3O2 Responses: OV-101	0.32 1: NI0.4	-	-	-	-	-	-	-
fenamiphos	C13H22NO3PS Responses: OV-101	1.66 l: FP8/NP8 OV	3.7 V-17: FP10/N	2.41 P3 OV-225: NP6	С	NR	NR	6-15-50	1-2-3
fenamiphos sulfone	C13H22NO5PS Responses: OV-101	4.5 1: FP50/NP20	- OV-17: FP(W	8.4 B)20/NP60	С	NR	NR	6-15-50	1-2-3
fenamiphos sulfoxide	C13H22N04PS Responses: OV-101	5.2 1: FP50/NP55	- OV-17: FP(W	8.1 B)28/NP45	С	NR	NR	6-15-50	1-2-3
fenarimol	C17H12Cl2N2O Responses: OV-101	6.6 l: HX10/NI5	-	10.1	С	P #	С#	50	3
fenarimol metabolite B	C17H14N2OCl2 Responses: OV-101	4.6 l: HX19	-	-	NR	NR	NR	6-15-50	-
fenarimol metabolite C	C17H14N2OCl2 Responses: OV-101	4.6 1: HX8	-	-	S		-	6	-
fenbuconazole	C19H17CIN4 Responses: OV-101	9.8 1: NI1000/NP7	-0	-	С	NR	NR	6-15-50	1-2-3
fenfuram	C12H11NO2 Responses: OV-101	0.54 1: NP5/NP(WB	1.47	0.62	С	-	-	-	-
fenhexamid	C14H17Cl2NO2 Responses:OV-101	3.1 :NI(WB)2/NP(- (WB)220 OV-	3.7 ·17:NI(WB)5	NR	NR	NR	6-15-50	1-2-3
fenitrothion	C9H12NO5PS Responses: OV-101	0.84 1: FP(WB)1/NI	1.82 P1 OV-17: FP	1.05 3/FP(WB)1.1	С	С	С	15	2
fenitrothion oxygen analog	C9H12NO6P Responses: OV-101	0.72 1: FP3 OV-17: I	- FP10	0.83	C	-	-	-	-
fenoxaprop ethyl ester	C18H16NO5Cl Responses: OV-101	8.1 1: NI250	11.3	10.5	S	V	V	50	3
fenoxycarb	C17H19NO4 Responses: OV-101	5 1: NP50 OV-17	- : NP50	7.3	С	-	-	-	-
fenpropathrin	C22H23NO3 Responses: OV-101	4.8 l: NI7/NI(WB)	7 0.2/NP30 O	5.7 V-17: NI13 OV-225: NI10	-	V #	V	15	2
fenpropimorph	C20H33NO Responses: OV-101	1.09 1. NP33 OV-17	- · NP14	0.62	C		-	50	1-2-3

Appendix I-31

Appendix I:	PESTDATA	Chemicals in	Order by	v Chemical .	Name	(continued)	1
, ipportant ii		Citotinoaio iii	Ci aci b	, Cilcilicai	war i i c	, commaca,	

		RRT/c	Γ/c RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
fenson	C12H10O3CIS Responses: OV-22	- 25: NI1.5	2.03	-	-	-	-	-	-
fensulfothion	C11H17O4PS2 Responses: OV-101	2.4 : TI12 OV-17:	- FP6/FP(WB)	3.8	С	NR	NR	6-15-50	1-2-3
fensulfothion oxygen analog	C11H17O5PS Responses: OV-101	2.49 : TI10 OV-17:	FP5	5	С	NR	-	6-15-50	-
fensulfothion oxygen analog sulfone	C11H17O7PS2 Responses: OV-101	1.99 : TI45 OV-17:	FP6	3.8	-	-	-	-	-
fensulfothion sulfone	C11H17O5PS2 Responses: OV-101	2.8 : NI9/NP7 O	- V-17: FP100	3.6	С	NR	-	6-15-50	-
fenthion	C10H15O3PS2 Responses: OV-101	0.96 : FP2/TI4 OV	1.46 7-17: FP3	1.18	С	S #	NR	6+15	1-2-3
fenthion oxygen analog	C10H15O4PS Responses: OV-101	0.78 l: FP7 OV-17: l	- FP9	1.12	С	NR	NR	6-15-50	1-2-3
fenthion oxygen analog sulfone*	C10H15O6PS2 Responses: OV-101	1.77 2.29 : FP(WB)4 O	- - V-17: FP(WB)	- 4.1 8	-	-	-	-	-
fenthion oxygen analog sulfoxide	C10H15O5PS Responses: OV-101	0.43	-	0.62	С	NR	NR	6-15-50	1-2-3
fenthion sulfone	C10H15O5PS2 Responses: OV-101	2.39 l: FP22 OV-17:	- FP20	4.7	С	NR	NR	6-15-50	1-2-3
fenvalerate*	C25H22CINO3 Responses: OV-101	20.3 22.5 : NI90	44 51	35 40	C	C	С	15	2
fipronil	C12H4Cl2F6N4OS Responses: OV-101	1.35 : NI2/NP10 C	8.7 DV-17: NI1/N	1.16 P5 OV-225: NI10	S	S	V	50	3
flamprop-M-isopropyl	C19H19CIFNO3 Responses: OV-101	2.46 : HX9/NI9	-	2.81	C	-	-	-	-
flamprop-methyl	C17H15CIFNO3 Responses: OV-101	1.94 : HX8/NI7	-	2.45	С	-	-	-	-
fluazifop butyl ester	C19H20F3NO4 Responses: OV-101	2.3 : HX19/HX(V	2.36 VB)18/NI125	2.31 6 OV-17: HX40 OV-2	C 225: NI3000	С	V	15	3
fluchloralin	C12H13ClF3N3O4 Responses: OV-101	0.53 : HX3/NI1.5	0.76 OV-17: HX3/	0.37 ′NI0.5	С	С	-	6	2

APPENDIX I

		RRT/c	RRT/c RRT/c RRT/c			Recoveries			
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
flucythrinate*	C26H23F2NO4 Responses: OV-101	14.7 16.1 : NI40/NI(WE	36.9 42 3)15	21.4 24	С	С	-	15	2+3
flumetsulam, methylated	C13H11F2N5O2S Responses: OV-101	12.4 : NP(WB)14	-	-	-	-	-	-	-
fluometuron	C10H11F3N2O Responses: OV-17	- : NP2	-	0.14	-	-	-	-	-
fluridone	C19H14F3NO Responses: OV-101	16.3 : HX400/NI15	24 500	-	-	NR	NR	6-15-50	-
fluroxypyr, methylated*	C8H7O3N2Cl2F Responses: OV-101	0.61 0.79 : NI2	-	-	-	-	-	-	-
flusilazole	C16H15F2N3Si Responses: OV-101	1.97 : NP(WB)5 O	- V-17: HX24/	2.33 HX(WB)5/NP(WB)6	C	-	-	-	-
fluvalinate*	C26H22ClF3N2O3 Responses:	25	56 59	35 38	С	С	-	15	2
FMTU	C10H9F3N2O2 Responses:	-	-	-	-	-	-	-	-
folpet	C9H4Cl3O2NS Responses: OV-101	1.23 : NI(WB)1 O	3.01 V-17: NI9	1.94	С	С	P	15+50	2+3
fonofos	C10H15OPS2 Responses: OV-101	0.52 : TI2 OV-17: I	0.56 FP0.7	0.44	С	С	С	6	2+3
fonofos oxygen analog	C10H15O2PS Responses: OV-101	0.39 : NP1 OV-17:	0.53 FP4/FP(WB)	0.38	V	NR	NR	6-15-50	1-2-3
formetanate hydrochloride	C11H16ClN3O2 Responses: OV-101	0.9 : NP400 OV-1	- 7: NP430	0.45	-	-	-	-	-
formothion	C6H12NO4PS2 Responses: OV-17	- : FP(WB)10	-	0.91	С	NR	NR	6-15-50	1-2-3
fosthiazate	C9H18NO3PS2 Responses: OV-101	1.08 : FP100/NI100	3 00/NP40 OV	1.66 7-17: FP10/NI120/NP	C 7 OV-225: FP15/NI	NR 300	NR	6-15-50	1-2-3
fuberidazole	C11H8N2O Responses: OV-101	0.71 : HN(WB)0.5/	- ′NP(WB)3 C	0.95 OV-17: NP5.5	С	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular RRT/c	RRT/c	RRT/c RRT/c		Recoveries				
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
urilazole	C11H13Cl2NO3 Responses: OV-103	0.46 l: NI1.5/NP50	0.6 OV-17: NI1/	0.39 NP1.8 OV-225: NI1.6	С	S	-	50	3
G-27550	C8H12N2O Responses: OV-102	0.28 1: NP3 OV-17: 1	- NP3	0.29	С	-	-	-	-
Gardona	C10H9Cl4O4P Responses: OV-101	1.58 1: FP9/TI8 OV	2.72 -17: FP10/FP	1.97 (WB)3	С	NR	NR	6-15-50	1-2-3
GS-31144	C8H12N2O2 Responses: OV-101	- 1: NI220/NP10	- 0 OV-17: NI7	- 750/NP100	-	NR	NR	6-15-50	1-2-3
naloxyfop methyl ester	C16H13ClF3NO4 Responses: OV-101	1.55 l: HX(WB)9/N	- I5 OV-17: H	1.4 X(WB)6/NI4.5	-	-	-	-	-
heptachlor	C10H5Cl7 Responses: OV-102	0.83 1: NI0.6 OV-17	0.52 : NI0.4	0.6	С	С	С	6	1
neptachlor epoxide	C10H5Cl7O Responses: OV-102	1.29 l: HX0.7/TR1	1.22 OV-17: HX0.	1.15 9/NI2	С	С	С	6	2
neptachloronorbornene	C7H3Cl7 Responses: OV-1	- 7: NI0.2	-	0.23	-	-	-	-	-
heptenophos	C9H12ClO4P Responses:	-	-	-	С	-	-	-	-
hexachlorobenzene	C6Cl6 Responses: OV-102	0.45 l: HX0.5/NI0.2	0.25 5 OV-17: ΗΣ	0.33 K0.3/NI0.3 OV-225: NI0.3	С	С	P	6	1
hexachlorobutadiene	C4Cl6 Responses: OV-1	- 7: NI0.1	-	0.04	-	V #	P	6	1
hexachlorocyclopentadiene	C5Cl6 Responses: OV-102	0.12 l: TR0.4 OV-17	- ': NI0.8	0.06	-	-	-	-	-
nexachloroethane	C2Cl6 Responses: OV-1	- 7: NI0.1	-	0.02	-	-	-	-	-
hexachloronorbornadiene	C7H2Cl6 Responses: OV-1	- 7: NI0.2	-	0.12	-	-	-	-	-
hexachlorophene	C13H6Cl6O2 Responses: OV-102	13 1: NI(WB)2 OV	13 /-17: NI400 (16 OV-225: NI1200	-	NR	NR	6-15-50	-
hexachlorophene dimethyl ether	C15H10Cl6O2 Responses: OV-102	9.7 1: TR7	-	-	-	NR	NR	6-15	-

Name	Molecular Formula	RRT/c RRT/c OV-101 OV-225	RRT/c		Recoveries				
				OV-17	302	303	304	Ethers	CH ₂ Cl ₂
hexaconazole	C14H17Cl2N3O Responses: OV-10	1.86 1: HX6/NI3 O	2.91 V-17: NP(WB	1.79)23	C	-	-	-	-
hexazinone	C12H20N4O2 Responses: OV-10	2.91 1: HN(WB)3/N	- JP(WB)15	-	P	NR	NR	6-15-50	1-2-3
hexythiazox	C17H21CIN2O2S Responses: OV-10	1.28 1: NI(WB)70/N	- VP(WB)90 O	2.41 V-17: FS(WB)90/NI	- (WB)80/NP(WB)80	S #	NR	50	2+3
HOE-030291	C17H16Cl2O5 Responses: OV-10	7.9 1: NI20 OV-17:	10.8 NI70 OV-22	12.6 5: NI20	-	-	-	-	-
hydramethylnon*	C25H24F6N4 Responses: OV-10	2.55 32 44 1: NI(V)250	4.5 53	- - -	-	-	-	-	-
hydroxy chloroneb	C7H6Cl2O2 Responses: OV-10	0.15 1: T R 7	0.24	-	-	NR	-	6-15	-
imazalil	C14H14Cl2N2O Responses: OV-10	1.76 1: NI30/NP(WI	4 3)12 OV-17:	2.08 HX19/HX(WB)2/N	C VI(WB)5/NP(WB)10	NR	NR	6-15-50	-
imazamethabenz methyl ester*	C16H20N2O3 Responses: OV-10	- 1.79 1: HX540/HX(- 3.5 WB)50/NI45	2.44 2.76 /NP(WB)40 OV-17	C : HX60	-	-	-	-
imazethapyr ammonium salt methyl ester	C16H21N3O3 Responses: OV-10	2.4 1: NI120/NP50	4.3 OV-17: NI12	3 20/NP70 OV-225: N	- I160	-	-	-	-
imidacloprid	C9H10ClN5O2 Responses: OV-10	1.84 1: NI200/NP50	-	-	-	NR	NR	6-15-50	1-2-3
IN-A3928	C11H18N4O2 Responses: OV-10	3.06 1: HN(WB)1.4/	- ′NP(WB)29	-	S	NR	NR	6-15-50	1-2-3
IN-B2838	C10H15N3O3 Responses: OV-10	0.7 1: HN(WB)0.6/	- ′NP(WB)23	0.8 OV-17: HN(WB)0.2/	P NP(WB)13	NR	NR	6-15-50	1-2-3
IN-T3935	C11H18N4O3 Responses: OV-10	4.7 1: HN(WB)73/	- NI(WB)230	-	S	-	-	-	-
IN-T3936	C10H15N3O4 Responses: OV-10	1.41 1: HN(WB)1.6/	- ′NP(WB)51 ·	2.55 OV-17: HN(WB)1.2/	S NP(WB)53	NR	NR	6-15-50	1-2-3
IN-T3937	C12H20N4O3 Responses: OV-10	4.7 1: HN(WB)390,	- /NI(WB)400	-	S	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular Formula		RRT/c		Recoveries				
Name			OV-225		302	303	304	Ethers	CH ₂ Cl
ioxynil methyl ether	C8H5I2NO Responses: OV-101	0.71 l: HN(WB)5/N	- VI1	-	-	-	-	-	-
iprobenfos	C13H21O3PS Responses: OV-101	0.6 l: FP(WB)1 O	- V-17: FP2	0.54	С	-	-	-	-
iprodione metabolite isomer	C13H13Cl2N3O3 Responses: OV-101	5.3 l: HX(WB)20/	- NI1000 OV-1	7.5 17: HX80	С	S	-	50	-
iprodione*	C13H13Cl2N3O3	4.2	18	5.2 6.3	C	S #	NR	50	1-2-3
	Responses: OV-101	l: HX13/NI15/	NP15 OV-1	7: HX20/NI35/NP200 OV	-225: N175				
isazofos	C9H17ClN3O3PS Responses: OV-101	0.55 1: NI30/NP0.4	0.8 OV-17: FP(V	0.63 VB)1/NI10/NP0.2 OV-225	C : NI20	С#	-	50	2+3
isocarbamid	C8H15N3O2 Responses: OV-101	0.44 1: HN(WB)0.2/	- /NP(WB)0.5	0.82 OV-17: NP7	С	-	-	-	-
isofenphos	C15H24NO4PS Responses: OV-101	1.36 l: FP2/NI20 O	1.73 V-17: FP2	1.38	С	С	-	15+50	-
isofenphos oxygen analog	C15H24NO5P Responses: OV-101	1.17 l: FP10 OV-17:	1.74 FP7 OV-225	1.24 :: FP5	С	-	-	-	-
isopropalin	C15H23N3O4 Responses: OV-101	1.14 l: NI2/NP3 O	1.24 V-17: NI3/NF	1.01 P15 OV-225: NI2	С	С	-	6	-
isoprothiolane	C12H18O4S2 Responses: OV-101	1.6 l: FS(WB)10/N	4.1 VI(WB)3	3.17	С	-	-	-	-
isoproturon	C12H18N2O Responses: OV-17:	- NP(WB)10	-	0.89	S	-	-	-	-
isoxaflutole (prop)	C15H12SNO4F3 Responses: OV-101	1.11 l: NI40/NP100	4.7 OV-17: NI40	1.33 0/NP200 OV-225: NI40	NR	V #	S #	50	3
jodfenphos	C8H8Cl2IO3PS Responses: OV-17:	- FP7	-	2.11	С	-	-	-	-
kresoxim-methyl	C18H19NO4 Responses: OV-101	2 l: NI(WB)10/N	3.02 VP(WB)50 O	3.38 V-17: NI(WB)15/NP(WB)4	P 0 OV-225: NI(C (WB)10	С	15+50	3
KWG 1323	C14H16ClN3O3 Responses: OV-101	0.99 l: NI3/NP35-C	1.91 OV-17: NI1/N	0.96 P5 OV-225: NI3/NP65	С	NR	NR	6-15-50	1-2-3
KWG 1342	C14H18ClN3O3 Responses: OV-101	4 l: NI1000/NP1	15 000 OV-17: 1	4.2 NI200/NP50 OV-225: NP10	-	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular Formula	RRT/c OV-101	RRT/c OV-225	RRT/c OV-17	Recoveries					
Name					302	303	304	Ethers	CH ₂ Cl ₂	
lactofen	C19H15ClF3NO7 Responses: OV-101	7.3 : NI10	-	-	-	-	С	50	2+3	
lambda-cyhalothrin	C23H19ClF3NO3 Responses: OV-101	7.4 : NI10 OV-17:	- HX30	8	С	-	-	-	-	
leptophos	C13H10BrCl2O2PS Responses: OV-101	5.8 : FP14/TI20/7	7.7 ГR11 OV-17:	8.5 FP(WB)15/NI12	С	С	С	6	2	
leptophos oxygen analog	C13H10BrCl2O3P Responses: OV-101	4.2 : FP60/TI65	7.6	6.5	С	-	-	-	-	
leptophos photoproduct	C13H11Cl2O2PS Responses: OV-101	2.38 : NI(WB)2/TI	3.24 5 OV-17: NI	3.14 5 OV-225: NI5	С	-	-	-	-	
lindane	C6H6Cl6 Responses: OV-101	0.48 : HX0.6/TR0.	0.69 5 OV-17: NIC	0.47	С	С	С	6	1	
linuron	C9H10Cl2N2O2 Responses: OV-101	0.85 : TR28	2.13	0.95	V	V #	V	50	3	
malathion	C10H19O6PS2 Responses: OV-101	0.91 : NI(WB)7/NI	1.49 P1 OV-17: FP	1.05 3/NI7 OV-225: NI44	С	С	С	15+50	3	
malathion oxygen analog	C10H19O7PS Responses: OV-101	0.68 : TI7 OV-17: I	1.55 FP5	0.87	С	NR	NR	6-15-50	1-2-3	
MB45950	C12H4SN4F6Cl2 Responses: OV-101	1.25 : NI2/NP8 O	8 V-17: NI1/NP	1.09 6 OV-225: NI6	S	P	V	15+50	2+3	
MB46136	C12H4SO2N4F6Cl2 Responses: OV-101	2.06 : NI2/NP30 C	31 OV-17: NI2/N	1.98 P10 OV-225: NI30	S	S	V	50	2+3	
MCPA methyl ester	C10H11ClO3 Responses: OV-101	0.19 : HX(WB)2/N	- NI600	-	-	-	-	-	-	
mecarbam	C10H20NO5PS2 Responses: OV-101	1.28 : FP(WB)1.7/1	2.67 NI5 OV-17: F	1.58 P3/FP(WB)1.9 OV-225:	C HN4		-	50	-	
mecoprop methyl ester	C11H13ClO3 Responses: OV-101	0.19 : HX(WB)2/N	- NI30	-	-	-	-	-	-	
melamine	C3H6N6 Responses: OV-101	0.42 : NP100 OV-1	- 7: NP9	0.42	NR	-	-	-	-	
mephosfolan	C8H16NO3PS2 Responses: OV-17	- 7: FP3	-	2.51	С	-	-	-	-	

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

		RRT/c		Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ C
merphos*	C12H27PS3 Responses: OV-10	1.34 1.95 01: FP3/TI5 O'	0.65 1.64 V-17: FP25	1.43 1.88	-	С	С	6+15+50	3
metalaxyl	C15H21NO4 Responses: OV-10	0.81 01: HX1000/NI	- 1000/NP7 C	0.9 DV-17: NI1000/NP50	С	NR	NR	6-15-50	1-2-
metamitron	C10H10N4O Responses: OV-10	2.24 01: NI20	-	-	-	-	-	-	-
metasystox thiol	C6H15O3PS2 Responses: OV-10	0.28 01: FP(WB)8 O	0.49 V-17: FP(WB	0.32)0.8	С	-	-	-	-
metasystox thiono*	C6H15O3PS2 Responses: OV-10	- 0.31 01: FP6 OV-17:	- 0.49 FP(WB)2	0.18 0.32	-	-	-	-	-
metazachlor	C14H16ClN3O Responses: OV-10	1.5 01: NI34 OV-17	- 7: HX5/NP4	1.46	C	-	-	-	-
methabenzthiazuron	C10H11N3OS Responses: OV-10	0.35 01: HN(WB)0.5	0.7 /NI320/NP1	0.41 5 OV-17: NP24 OV-225:	C NI2550	NR	NR	6-15-50	1-2-
methamidophos	C2H8NO2PS Responses: OV-10	0.07 01: FP(WB)0.7	0.25 OV-17: FP1/	0.09 FP(WB)0.6 OV-225: FP4	V	-	-	-	-
methazole	C9H6Cl2N2O3 Responses: OV-10	0.97 01: HX13/NI40	1.46	-	-	-	-	-	-
methidathion	C6H11N2O4PS3 Responses: OV-10	1.4 01: FP5/FP(WB	3.33)1.6/NP3 O	2.28 V-17: FP(WB)2.4/NI10 (C OV-225: NI50	S	P #	50	3
methidathion oxygen analog	C6H11N2O5PS2 Responses: OV-10	1.07 01: NI100/NP40	- 0 OV-17: FP1	1.8 25/NI200/NP40	-	NR	NR	6-15-50	1-2-
methidathion sulfone	C5H8N2O3S2 Responses: OV-10	0.56 01: NI150/NP10	2.29 00 OV-17: NI	0.82 200/NP35 OV-225: NI40	-	NR	NR	6-15-50	1-2-3
methidathion sulfoxide	C5H8N2O4S2 Responses: OV-10	0.45 01: NI8/NP35	2.25 OV-17: NI8/1	0.71 NP10 OV-225: NI30	-	NR	NR	6-15-50	1-2-
methiocarb	C11H15NO2S Responses:	0.88	-	-	С	-	-	-	-
methiocarb sulfone	C11H15NO4S Responses: OV-10	0.8 01: NI200/NP20	-	1.17	S	NR	NR	6-15-50	1-2-
methomyl	C5H10N202S Responses: OV-10	0.1 01: NI220	-	-	-	NR	NR	6-15-50	1-2-

	Molecular	RRT/c	RRT/c	RRT/c		Recoveries			
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
methoprotryne	C11H21N5OS Responses: OV-10	2.07 1: NP189 OV-1	- 7: NP(WB)8	2.92	С	-	-	-	-
methoxychlor olefin	C16H14Cl2O2 Responses: OV-102	2.97 l: NI(WB)8 OV	3.7 V-17: NI10 O	4.2 V-225: NI9	С	С	С	6	2
methoxychlor, o, p'-	C16H15Cl3O2 Responses: OV-102	3.3 l: NI(WB)2 OV	4.5 V-17: NI9 OV	5 -225: NI23	-	С	-	6	-
methoxychlor, p, p'-	C16H15Cl3O2 Responses: OV-10	4.7 l: TR9 OV-17:	7.2 NI7	7.2	С	С	С	6	2
methyl 2,3,5-triiodobenzoate	C8H5I3O2 Responses: OV-10	2.28 l: NI1.5	-	-	-	-	-	-	-
methyl 2,3,6-trichlorobenzoate	C8H5Cl3O2 Responses: OV-10	0.23 1: TR0.6 OV-17	0.21 7: NI0.3	0.18	-	-	-	-	-
methyl 3,5-dibromo-4-methoxy= benzoate	C9H8Br2O3 Responses: OV-10	0.56 l: NI(WB)2 OV	0.49 V-17: NI(WB)	0.47 1 OV-225: NI(WB)1.5	-	-	-	-	-
methyl 4-chloro-1H-indole-3-acetate	C11H10ClNO2 Responses: OV-102	1.17 l: MC25/NI200	-	-	R	R #	NR	50	1-2-3
metobromuron	C9H11BrN2O2 Responses: OV-10	0.67 l: HX8/NI5 O	1.44 V-17: HX10	0.69	С	NR	NR	6-15-50	1-2-3
metolachlor	C15H22ClNO2 Responses: OV-10	1.03 l: HX5/NI12(1.21 OV-17: HX7	0.93 OV-225: NI9	С	S#	NR	50	1-2-3
metolcarb	C9H11NO2 Responses:	0.17	-	-	С	-	-	-	-
metoxuron	C10H13ClN2O2 Responses: OV-1	- 7: HX25	-	0.18	V	NR	NR	6-15-50	1-2-3
metribuzin	C8H14N4OS Responses: OV-10	0.57 1: NI0.5/NP2 (1.47 OV-17: NI0.4	0.91 /NP11 OV-225: NI0.7	V	NR	NR	50	1-2-3
metribuzin, deaminated diketo metabolite*	C7H11N3O2 Responses: OV-10	0.5 0.73 1: NI75, OV-17:	0.79 1.29 N1150, OV-9	0.44 0.52 25: NI160	NR	NR	NR	6-15-50	1-2-3
metribuzin, deaminated metabolite	C8H13N3OS	0.83	3.77	1.06 /NP125 OV-225: NI60	С	NR	NR	6-15-50	1-2-3
metribuzin, diketo metabolite	C7H12N4O2 Responses: OV-10	0.56 l: NI35/NP40	1.41 OV-17: NI6/1	0.55 NP20 OV-225: NI15	NR	NR	NR	6-15-50	1-2-3

Recoveries RRT/c RRT/c RRT/c Molecular OV-101 OV-17 302 303 304 CH,Cl, **Formula** OV-225 Ethers Name C7H13O6P 0.13 \mathbf{C} NR mevinphos, (E)-0.16 NR 6-15-50 Responses: OV-101: FP2 OV-17: FP2 C7H13O6P 0.15 \mathbf{C} NR 6-15-50 mevinphos, (Z)-0.13 Responses: OV-101: FP2/FP(WB)1 OV-17: FP2/FP(WB)0.6 MGK 264 C17H25NO2 1.6 Responses: C10Cl12 5.8 2.95 \mathbf{C} P 6 5.6 mirex Responses: OV-101: NI7 OV-17: NI4 mirex, 5,10-dihydro-* C10H2Cl10 2.14 2.47 3.21 4.3 Responses: OV-101: NI100 molinate C9H17NOS 0.19 Responses: monocrotophos C7H14NO5P 0.311.6 0.5C NR NR 6-15-50 1-2-3 Responses: OV-101: FP(WB)0.7/TI15 OV-17: FP2/FP(WB)0.8 OV-225: FP3 monolinuron C9H11ClN2O2 0.480.91 0.48 \mathbf{C} Responses: OV-101: HX4 OV-17: HX18 OV-225: NI180 C9H11ClN2O 0.1NR NR 6-15-50 1-2-3 monuron Responses: OV-101: TR175 NR 1-2-3 myclobutanil C15H17ClN4 1.9 7.2 2.6 \mathbf{C} NR 6-15-50 Responses: OV-101: HN(WB)0.7/NI25/NP(WB)7 OV-17: HX10/HX(WB)4/NI(WB)21/NP75/NP(WB)6 myclobutanil alcohol metabolite C15H17ClN40 3.6 7.5 NR NR 1-2-3 37.1 6-15-50 Responses: OV-101: NI60 OV-17: NP375 C15H17N4O2Cl myclobutanil dihydroxy metabolite 6.5 11.5 NR NR NR 6-15-50 1-2-3 Responses: OV-17: NI1000/NP1000 N, N-diallyl dichloroacetamide C8H11Cl2NO 0.22 0.14 \mathbf{C} S S 2+3 0.19 15+50Responses: OV-101: HX1/NI1/NP1 OV-17: NI1 OV-225: NI1 N-(3,4-dichlorophenyl)-N'-methyl= C8H8Cl2N2O 0.170.14 0.1NR NR 6-15-50 Responses: OV-101: HX20/NI9 OV-17: NI5 OV-225: NI12 C14H11Cl2NO2 n-acetyl nitrofen Responses: OV-101: TR500

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

-		RRT/c	RRT/c	RRT/c		Recoveries			
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
naled	C4H7Br2Cl2O4P Responses: OV-101	0.34 : NP11 OV-17	- : FP20/NI8	0.32	С	NR	NR	6-15-50	1-2-3
napropamide	C17H20NO2 Responses: OV-101	1.7 : NP40	-	2.12	С	-	-	-	-
neburon	C12H16Cl2N2O Responses: OV-101	0.11 : TR25	-	-	C	NR	NR	6-15-50	1-2-3
nitralin	C13H19N3O6S Responses: OV-101	3.8 : NI(WB)1 OV	24 V-17: NI7 OV	6.3 -225: NI21	С	P	P	50	3
nitrapyrin	C6H3Cl4N Responses: OV-101	0.2 : HX2/NI(WB	0.18 5)0.8/NP(WB	0.2)4 OV-17: HX(WB)0	C 0.6 OV-225: NI0.9	С	V	6	2
nitrofen	C12H7Cl2NO3 Responses: OV-101	2.03 : NI(WB)1 OV	3.8 V-17: NI3 OV	2.71 -225: NI3	С	С	С	15	2
nitrofluorfen	C13H7ClF3NO3 Responses: OV-101	0.96 : HX5/NI1 O	1.45 V-17: HX3 C	0.86 V-225: NI1.5	С	С	С	15	2
nitrothal-isopropyl	C14H17O6N Responses: OV-101	1.1 : NI(WB)2 OV	- V-17: NP(WB)	0.68	C	-	-	-	-
nonachlor, cis-	C10H5Cl9 Responses: OV-101	2.52 : HX1/NI2 O	3.33 V-17: NI2 O	2.61 /-225: NI3	С	С	С	6	1
nonachlor, trans-	C10H5Cl9 Responses: OV-101	1.75 : TR2 OV-17:	1.45 HX0.4/NI0.8	1.42	С	С	С	6	1
norea	C13H15N2O Responses: OV-17	- : NP(WB)8	-	1.05	С	-	-	-	-
norflurazon	C12H9ClF3N3O Responses: OV-101	4.5 : HX50 OV-17	- 7: NP(WB)10	5.01	V	NR	NR	6-15-50	-
NTN33823	C9H11N4Cl Responses: OV-101	3 : NP300 OV-1	- 7: NP1000	1.18	-	NR	NR	6-15-50	1-2-3
NTN35884*	C9H9N5O2Cl Responses: OV-101	1.59 5 : NI550/NP21	- - 0	-	-	NR	NR	6-15-50	1-2-3
nuarimol	C17H12CIFN2O Responses: OV-101	3.36 : NI5 OV-17: l	7.3 HX4	4.8	С	NR	С#	50	1-2-3
octachlor epoxide	C10H4Cl8O Responses: OV-101	1.33 : TR1 OV-17:	0.94 NI0.6	1.05	С	С	С	6	1

Appendix I–41

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c RRT/c					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
octachlorocyclopentane	C5Cl8 Responses: OV-1	- 7: NI0.2	-	0.22	-	-	-	-	-
octhilinone	C11H19NOS Responses: OV-10	0.66 1: FS4	-	0.64	С	-	-	-	-
ofurace	C14H16NO3Cl Responses: OV-10	2.62 1: HX17 OV-17	18.6 7: HX51 OV-	5.4 225: NI44	С	-	-	-	-
omethoate	C5H12NO4PS Responses: OV-10	0.25 1: FP(WB)0.9/	1.11 ГI25 OV-17:	0.39 FP5/FP(WB)1.1 OV-225	C : FP5	NR	NR	6-15-50	1-2-3
oryzalin	C12H8N4O6S Responses: OV-10	4.7 1: NI8800	-	-	-	NR	NR	6-15-50	-
ovex	C12H8Cl2O3S Responses: OV-10	1.61 1: HX4/TR3 C	3.04 OV-17: HX5 (2.2 OV-225: NI3	С	С	С	15	2
oxadiazon	C15H18Cl2N2O3 Responses: OV-10	1.97 1: HX4/NI4 O	2.48 V-17: NI2	1.96	С	С	P	15	-
oxadixyl	C14H18N2O4 Responses: OV-10	2.5 1: NI1700/NP8	14 OV-17: NP1	5 4 OV-225: NI4500	С	NR	NR	6-15-50	1-2-3
oxamyl	C7H13N3O3S Responses:	-	-	-	-	-	-	-	-
oxamyl oxime metabolite	C5H10N2O2S Responses: OV-10	0.25 1: HN(WB)0.5/	0.92 /NI(WB)4/N	0.28 P(WB)4 OV-17: HN(WB	C)0.4/NI(WB)3/	NR NP(WB)3	NR OV-225: NI	6-15-50 (WB)13	1-2-3
oxycarboxin	C12H13NO4S Responses: OV-10	3.28 1: FS(WB)17/H	- IN(WB)3/NI	9.4 P(WB)130 OV-17: HN(W	R B)4	-	-	-	-
oxydemeton-methyl	C6H15O4PS2 Responses: OV-1	0.46 7: FP(WB)4	0.49	0.31	С	-	-	-	-
oxydemeton-methyl sulfone	C6H15O5PS2 Responses: OV-10	0.72 1: FP(WB)2 O'	- V-17: FP(WB)	1.48 3	С	-	-	-	-
oxydeprofos	C7H17O4SP Responses:	-	-	-	-	-	-	-	-
oxyfluorfen	C15H11ClF3NO4 Responses: OV-10	2 1: NI5 OV-17: 1	4 HX9/NI2/NI	2.16 2350	С	С	С	15	2
oxythioquinox	C10H6N2OS2 Responses: OV-10	1.57 1: NI(WB)1	-	1.85	С	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c]	Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
paclobutrazol	C15H20ClN3O Responses: OV-10	1.52 01: NP(WB)6 O	- V-17: HX7/H	1.59 IX(WB)3/NI(WB)85/N	C P(WB)5	-	-	-	-
parathion	C10H14NO5PS Responses: OV-10	0.98 01: NI(WB)4/NI	1.91 P2 OV-17: FP	1.07 2/NI4 OV-225: FP2/N	C I6	С	С	15	2
parathion oxygen analog	C10H14NO6P Responses: OV-10	0.8 01: NI(WB)5/NI	- P3 OV-17: FP	0.86 4/NI15	C	NR	NR	6-15-50	1-2-3
parathion-methyl	C8H10NO5PS Responses: OV-10	0.71 01: FP(WB)0.9/1	1.64 NI(WB)3/NP	0.87 1.5 OV-17: FP2/FP(WF	C 3)1/NI3 OV-225:	C FP1/NI11	С	15	2
parathion-methyl oxygen analog	C8H10NO6P Responses: OV-10	0.55 01: TI5/TR11 C	1.71 V-17: FP10	0.66	-	NR	NR	6-15-50	1-2-3
PB-7, methylated	C20H25ClN2O3S Responses: OV-10	23 01: NI150/NP30	57 0 OV-17: NI	43 200/NP500 OV-225: NI	300	-	-	-	-
PB-9	C19H25ClN2O2S Responses: OV-10	25 01: NI300/NP50	87 0 OV-17: NI	46 250/NP750 OV-225: NI	V 500	NR	NR	6-15-50	1-2-3
pebulate	C10H21NOS Responses: OV-10	0.17 01: HN(WB)0.4/	- /NP7 OV-17:	0.1 NP6	С	P	-	15	-
penconazole	C13H15Cl2N3 Responses: OV-10	1.24 01: NP(WB)3 O	- V-17: HX3/H	1.32 (X(WB)2/NI(WB)2/NE	C P(WB)3	-	-	-	-
pendimethalin	C13H19N3O4 Responses: OV-10	1.22 01: NI3/NP5 O	1.48 V-17: NI1.5/N	1.21 IP6 OV-225: NI3	C	С	P	15	2
pentachloroaniline	C6H2Cl5N Responses: OV-10	0.67 01: HX0.5/NI0.4	0.79 4/NP10 OV-1	0.66 7: NI0.6/NP10 OV-225	C 5: NI0.5	С	С	6	1
pentachlorobenzene	C6HCl5 Responses: OV-10	0.24 01: HX0.3/NI0.2	0.13 25 OV-17: NI	0.16 0.3 OV-225: NI0.25	C	С	С	6	1
pentachlorobenzonitrile	C7Cl5N Responses: OV-10	0.5 01: NI0.5 OV-17	0.59 : NI3	0.45	C	С	P	15	2
pentachlorophenyl methyl ether	C7H3Cl5O Responses: OV-10	0.46 01: HX0.4/TR0.	0.3 4 OV-17: NI0	0.34	C	С	С	6	1
pentachlorophenyl methyl sulfide	C7H3Cl5S Responses: OV-10	0.94 01: HX0.7/NI0.4	0.69 4 OV-17: NI3	0.87 OV-225: NI0.5	С	С	С	6	1
permethrin, cis-	C21H20Cl2O3 Responses: OV-10	9.4 01: NI75	11.1	13.8	C	V#	С	6+15	2

Appendix I-43

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c	Recoveries				
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
permethrin, trans-	C21H20Cl2O3 Responses: OV-102	10.2 1: NI100	13	15	С	V #	С	6+15	2
Perthane	C18H2OCl2 Responses: OV-102	2.23 1: TR150 OV-1	2.01 7: NI25	2.42	С	С	С	6	1
Perthane olefin	C18H19Cl Responses: OV-102	1.53 1: TR40	0.95	-	-	С	С	6	1
phenmedipham	C16H16N2O4 Responses: OV-102	0.32 1: HN(WB)1.5	- OV-17: NP40	0.41	-	-	-	-	-
phenothiazine	C12H9NS Responses: OV-102	1.16 l: HN(WB)1.4	- OV-17: NP4	1.56	-	-	-	-	-
phenothrin*	C23H26O3	5.4 11.5	4.8 10.9	6.5 15	-	-	-	-	-
	Responses: OV-103	1: NI500/NI(W	B)40						
phenthoate	C12H17O4PS2 Responses: OV-102	1.31 l: FP(WB)2/NI	2.05 5/TI3 OV-1	1.83 7: FP2/FP(WB)2.6/NI5	С	С	-	15+50	-
phorate	C7H17O2PS3 Responses: OV-102	0.37 l: FP1/NI(WB)	0.38 24/TI1 OV-	0.32 17: FP0.5/NI14 OV-225:	C FP0.5/NI17	V #	V #	6	1
phorate oxygen analog	C7H17O3PS2 Responses: OV-102	0.3 l: NI400/TI2(0.37 OV-17: FP1 C	0.29 OV-225: FP0.5	С	NR	NR	6-15-50	1-2-3
phorate oxygen analog sulfone	C7H17O5PS2 Responses: OV-102	0.66 l: FP1/TI10 O	- V-17: FP6	1.02	С	NR	NR	6-15-50	1-2-3
phorate oxygen analog sulfoxide	C7H17O4PS2 Responses: OV-102	0.78 1: NI300 OV-17	7: FP40	1.06	С	NR	NR	6-15-50	1-2-3
phorate sulfone	C7H17O4PS3 Responses: OV-103	0.97 l: NI4/TI4 OV	3.26 -17: FP2	1.3	С	S #	S #	6-15-50	3
phorate sulfoxide	C7H17O3PS3 Responses: OV-103	0.89 l: FP5/NI8/NP	2.55 4 OV-17: FP	1.26 6	С	NR	NR	6-15-50	1-2-3
phosalone	C12H15ClNO4PS2 Responses: OV-103	5.5 1: NP10/TR15	5.5 OV-17: NI12	9.1	С	С	С	50	2+3
phosalone oxygen analog	C12H15CINO5PS Responses: OV-102	3.8 1: FP600/FP(W	- B)8/NI160 •	6.2 OV-17: FP(WB)12	С	-	-	-	-
phosfolan	C7H14NO3PS2 Responses: OV-1	- 7: FP5	-	2.69	С	-	-	-	-

		RRT/c	RRT/c RRT/c RRT/c			Recoveries				
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂	
phosmet	C11H12O4NPS2	4	14.9	8.4	\mathbf{C}	NR	-	6-15-50	3	
	Responses: OV-101:	: NI(WB)2/NI	P19 OV-17: F	P50/NI78 OV-225: FP50						
phosmet oxygen analog*	C11H12NO5PS	0.5	0.53	0.24	-	NR	NR	6-15-50	-	
		2	0.93	0.44						
	D OVIIOI	3.1	14.8	7.1						
	Responses: OV-101:	: N1900/NP10	0 OV-17: FP	150 OV-225: N1600						
phosphamidon*	C10H19CINO5P	0.53	-	0.57	\mathbf{C}	NR	NR	6-15-50	1-2-3	
		0.67	-	0.76						
	Responses: OV-101:	: FP10 OV-17:	FP2							
photodieldrin	C12H8Cl6O Responses: OV-101:	4.4 : TR6 OV-17:	15.5 NI5	8.5	-	С	С	15+50	2	
photodieldrin B	C13H9Cl5O	1.43	_	-	_	_	_	_	_	
photoarciani 2	Responses: OV-101:									
nhavim avvæn analag	C12H15N204P	0.86			C					
phoxim oxygen analog	Responses: OV-101:		-	-	C	-	-	-	-	
picloram methyl ester	C7H5Cl3N2O2	0.75	2.67	-	-	_	_	_	_	
,	Responses: OV-101:	: HX(WB)1.2/	/NI1.5/TR1							
picloram*	C6H3Cl3N2O2	0.25	_	_	-	_	_	_	_	
F		0.67	-	-						
	Responses: OV-101:	: NI100								
piperophos	C14H28NO3PS2	4.8	9.7	6.8	С	_	-	_	_	
r r · · · r	Responses: OV-101:	: FP15								
pirimicarb	C11H18N4O2	0.61	_	0.73	С	_	_	_	_	
primicaro	Responses: OV-17:			0.73	u					
	•	, ,	1.00	1.14	6			15.50	9	
pirimiphos-ethyl	C13H24N3O3PS Responses: OV-101:	1.14 · fp9/ti4/tr	1.03	1.14 5P3/NI4	С	С	С	15+50	3	
	•		150 01-17.1							
pirimiphos-ethyl oxygen analog	C13H24N3O4P	1.01	-	1.14	\mathbf{C}	-	-	-	-	
	Responses: OV-101:	: FP4/FP(WB)	1.6 OV-17: F	P(WB)2.4						
pirimiphos-methyl	C11H20N3O3PS	0.87	-	0.92	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	3	
	Responses: OV-101:	: FP2/FP(WB)	1.2/NI100/N	NP2 OV-17: FP2/FP(WB)	1.2					
PP 890	C9H10O2ClF3	1.05	1	-	-	_	-	_	_	
	Responses: OV-101:	: NI220 OV-22	25: NI150							
PPG-1576	C19H17CIF3NO5	6.7	_	_	-	_	P	50	2+3	
11010.0	Responses: OV-101:							00	410	

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RT/c RRT/c RRT/c			Recoveries				
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
PPG-2597	C20H17ClF3NO6 Responses: OV-101 OV-225: NI(WB)		3.16 HX(WB)110,	1.86 /NI(WB)85/NP(WB)15	- 0 OV-17: HN(W	NR B)120/HX(NR WB)66/NI	6-15-50 (WB) 78	1-2-3	
PPG-847, methylated	C15H9ClF3NO3 Responses: OV-101 OV-225: NI(WB)		5 IX(WB)10/N	2.4 I(WB)3/NP(WB)34 OV	- /-17: HN(WB)4/	- HX(WB)6.5	- 5/NI(WB)3	- /NP(WB)210	-	
PPG-947	C17H11ClF3NO7 Responses: OV-101	1.04 l: HN(WB)620,	- /NI(WB)1000	1.13 O OV-17: NI(WB)600	-	NR	NR	6-15-50	1-2-3	
PPG-947, methylated*	C18H13CIF3NO7	0.42 2.14 FHN(WR)5/N	0.97 5 H (WB) 5 / NP (0.49 2.4 WB)65 OV-17: HN(WB	- .)5 OV-995: NI/I	- WB)6	-	-	-	
pretilachlor	C17H26CINO2	1.88	1(WB)5/141 (1.99	C	(VD)0				
premacmor	Responses: OV-101		HX10	1.99	C	-	-	-	-	
probenazole	C10H9NO3S Responses:	-	-	-	С	-	-	-	-	
prochloraz	C15H16Cl3N3O2 Responses: OV-101	10.4 l: HX50/NI12	-	15.4	С	-	-	-	-	
procyazine	C10H13ClN6 Responses:	1.5	7.9	-	С	-	-	-	-	
procymidone	C13H11Cl2NO2 Responses: OV-101	1.37 l: NI12 OV-17:	3.04 HX1 OV-22	1.49 5: NI7	С	С	P	15	-	
prodiamine	C13H17F3N4O4 Responses: OV-17	0.94 7: NP(WB)50 (0.97 OV-225: NP50	0.66	С	-	-	-	-	
profenofos	C11H15BrClO3PS Responses: OV-101	1.8 l: FP7/FP(WB)	2.34 2.6/NI3 OV-	2.13 17: FP5/FP(WB)2.9	С	P	P	50	3	
profluralin	C14H16F3N3O4 Responses: OV-101	0.53 l: HX5/NI1/N	0.46 P1 OV-17: N	0.3 I0.8/NP9 OV-225: NI1	V	V	-	6	-	
Prolan	C15H13Cl2NO2 Responses: OV-101	2.81 l: NI(WB)1 OV	7.5 V-17: NI6 OV	3.9 -225: NI10	P	S	S	15	2	
promecarb	C12H17NO2 Responses: OV-101	1.58 l: TI400	-	-	V	-	-	-	-	
prometryn	C10H19N5S Responses: OV-101	0.77 1: FP200/NI40/	- /TI50 OV-17	0.74 : FP20	C	P #	P #	50	1-2-3	

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ C
pronamide	C12H11Cl2NO Responses: OV-101	0.51 l: HX1/NI2/N	0.84 P7 OV-17: N	0.4 I1/NP85 OV-225: NI	C	P	-	15+50	-
propachlor	C11H14ClNO Responses: OV-101	0.34 l: NI(WB)16/N	0.37 NP(WB)13 O	0.26 V-17: NI5/NI(WB)5	C OV-225: NI9/NI(W	NR B)5	NR	6-15-50	1-2-3
propanil	C9H9Cl2NO Responses: OV-101	0.66 l: HX6/NI3/N	2.82 I(WB)5 OV-	0.78 17: NI4 OV-225: NI8	С	NR	NR	6-15	3
propargite	C19H26O4S Responses: OV-101	3.8 1: FS45/NI(WE	4.8 3)230 OV-17:	4.3 NI2600 OV-225: NI1	C 300	С	-	15	2
propazine	C9H16ClN5 Responses: OV-101	0.53 l: NI(WB)110/	0.65 TI30 OV-17:	0.41 NI43 OV-225: NI37	С	S	NR	15+50	3
propetamphos	C10H20NO4PS Responses: OV-101	0.48 l: FP1.5 OV-17	: FP0.5	0.42	С	С#	-	15+50	2+3
propham	C10H13NO2 Responses: OV-101	0.13 1: NP(WB)2 O	- V-17: NP16	0.12	С	P	P	15	-
propiconazole*	C15H17Cl2N3O2	3.06 3.21	5.6	4	С	NR	NR	6-15-50	1-2-3
	Responses: OV-101	1: NI10/NI(WE	B)17 OV-17:1	HX9					
propoxur	C11H15NO3 Responses:	-	-	-	С	-	-	-	-
prosulfuron*	C15H16F3N5O4S	0.18 0.44	- 2.49 NH 20. OV 29	- 0.64	-	NR	NR	6-15-50	1-2-3
	Responses: OV-101								
prothiofos	C11H15Cl2PO2S2 Responses: OV-101	1.85 1: FP4/NI3/NF	1.74 23 OV-17: NI	1.82 3 OV-225: NI1	С	С	С	6	2
prothoate	C9H20NO3PS2 Responses: OV-101	0.75 1: FP1/NI5	1.55	0.79	С	-	-	-	-
pyracarbolid	C13H15NO2 Responses: OV-101	1.05 l: HN(WB)1.4	- OV-17: NP6	1.43	-	-	-	-	-
pyrazon	C10H8ClN3O Responses: OV-101	2.67 l: HN(WB)8/H	13 IX(WB)30/N	8 II(WB)26/NP(WB)56	C OV-17: HX(WB)56	NR 0 OV-225: N	NR NI3700	6-15-50	1-2-3
pyrazon metabolite A	C16H18ClN3O6 Responses: OV-101	2.62 1: HX(WB)260	-	-	-	-	-	-	-
pyrazon metabolite B	C6H4ClN3O Responses: OV-101	0.42 I: HN(WB)3/F	- IX(WB)42/N	0.9 II(WB)35/NP(WB)14	- OV-17: HN(WB)3	NR /HX(WB)2:	NR 3/NI(WB):	6-15-50 93/NP(WB)4	1-2-3 4

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c	Recoveries					
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
pyrazophos	C14H20N3O5PS Responses: OV-101	8.1 l: FP(WB)12 C	- OV-17: FP25	13	С	-	-	-	-	
pyrethrins*	C21H27O4 Responses: OV-101	2.12 2.95 1: NI25	1.76 2.84	1.76 2.7	-	С	С	50	-	
pyridaphenthion	C14H17O4N2SP Responses: OV-101	4.2 l: NI(WB)16	14	8.7	С	-	-	-	-	
pyrimethanil	C12H13N3 Responses: OV-101	0.67 l: NP(WB)0.5	-	-	С	S	S #	50	3	
pyrithiobac-sodium methyl ester	C14H13ClN2O4 Responses: OV-101 OV-225: NI(WB)		4 IX(WB)12/N	4.2 VI(WB)9/NP(WB)90 O	- V-17: HN(WB)2/	- HX(WB)13	- /NI(WB)18	- 8/NP(WB)85	-	
quinalphos	C12H15N2O3PS Responses: OV-101	1.32 l: FP5/FP(WB)	2 2.7 OV-17: F	1.64 TP3/FP(WB)3	С	С	-	15	-	
quintozene	C6Cl5NO2 Responses: OV-101	0.51 l: TR0.3 OV-17	0.46 7: NI0.5	0.46	С	С	С	6	1	
quizalofop ethyl ester	C19H17ClN2O4 Responses: OV-101	13.6 l: HX70/NI80	-	25	С	-	-	-	-	
RH-6467*	C19H15N4ClO Responses: OV-101	7.9 10.4 15 1: NI90/NP300	- - -	- - -	S	NR	NR	6-15-50	1-2-3	
RH-9129	C19H16N3ClO2 Responses: OV-101	14 l: NI40/NP190	-	-	V	NR	NR	6-15-50	1-2-3	
RH-9130	C19H16N3ClO2 Responses: OV-101	12 l: NI50/NP170	-	-	P	NR	NR	6-15-50	1-2-3	
ronnel	C8H8Cl3O3PS Responses: OV-101	0.81 l: NI(WB)1/TI	0.86 3 OV-17: FP	0.76 1/NI1 OV-225: NI2	С	С	С	6	2	
ronnel oxygen analog	C8H8Cl3O4P Responses: OV-101	0.64 1: NP3 OV-17:	1.02 FP5/FP(WB)	0.62	С	NR	-	6-15-50	-	
RPA 203328, methylated	C10H9F3O4S Responses: OV-101	0.26 l: NI0.5 OV-17	0.51 : NI0.4 OV-2	0.23 25: NI0.5 5	-	-	-	-	-	
RPA202248	C15H12SNO4F3 Responses: OV-101	1.13 l: NI40/NP120	4.7 OV-17: NI40	1.38 0/NP250 OV-225: NI60	NR	NR	NR	6-15-50	1-2-3	

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
S-bioallethrin	C19H26O3 Responses: OV-101	1.37 : NI2 OV-17: 1	1.22 NI2 OV-225:	1.12 NI2	-	С	-	50	-
schradan	C8H24N4O3P2 Responses: OV-101	0.58 : FP4/TI5 OV	- V-17: FP1	0.52	C	NR	-	6-15-50	-
sethoxydim	C17H29NO3S Responses: OV-101	3.34 : NI50	-	-	-	NR	NR	6-15-50	3
sethoxydim sulfoxide	C17H29NO4S Responses: OV-101	0.84 : NI50	-	-	-	NR	NR	6-15-50	3
silvex	C9H7Cl3O3 Responses: OV-101	0.48 : NI40	-	-	-	-	-	-	-
silvex methyl ester	C10H9Cl3O3 Responses: OV-101	0.45 : HX(WB)0.8/	0.44 /NI0.6	-	-	-	-	-	-
simazine	C7H12ClN5 Responses: OV-101	0.41 : NI(WB)90 C	0.83 OV-17: NI56/1	0.5 NP(WB)1.5 OV-225:	C NI130	NR	NR	50	1-2-3
simetryn	C8H15N5S Responses: OV-101	2.02 : NP7	1.21	-	С	-	-	-	-
Strobane*	C10H11Cl7 Responses: OV-101		- - - - - - -	- - - - - - -	-	С	C	6	1
sulfallate	C8H14CINS2 Responses: OV-101	0.38 : NI(WB)1 O	0.44 V-17: NI1 OV	0.36 7-225: NI1	С	С	С	6+15	2
sulfanilamide	C6H8O2N2S Responses: OV-17	- ': NP200	-	2.11	NR	NR	NR	6-15-50	1-2-3
sulfotep	C8H20O5P2S2 Responses: OV-101	0.34 : TI0.8 OV-17	: FP0.5	0.29	С	С	P	6+15	2
Sulphenone	C12H9ClO2S Responses: OV-101	1.26 : TR4	3.5	1.92	С		-	50	3

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular	RRT/c	RRT/c	RRT/c		Rec	Recoveries		
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
sulprofos	C12H19O2PS3 Responses: OV-101:	2.79 : FP(WB)47 C	- V-17: FP3	3.5	С	-	-	-	-
sulprofos oxygen analog sulfone	C12H19O5PS2 Responses: OV-101:	5.1 : FP(WB)80 C	- V-17: FP40/1	10.6 FP(WB)28/NI20/NP40	С	-	-	-	-
sulprofos sulfone	C12H19O4PS3 Responses: OV-101:	7.2 : FP(WB)16 C	- V-17: FP(WB	13.1 c)26	С	-	-	-	-
sulprofos sulfoxide*	C12H19O3PS3	2.78 6.1	-	3.6 11.7	С	-	-	-	-
	Responses: OV-101:	: FP(WB)14 C	V-17: FP(WB	5)29					
TCMTB	C9H6N2S3 Responses: OV-101:	1.5 : NI3/NP22 C	4.3 OV-17: NP36	2.67 OV-225: NI12	С	P	P	15	-
TDE, 0,p'-	C14H10Cl4 Responses: OV-101:	1.9 TR2 OV-17:	2.46 NI2	2.19	-	C	С	6	1
TDE, o,p'-, olefin	C14H9Cl3 Responses: OV-101:	1.19 TR12 OV-17	1.15 : NI2	1.2	-	-	-	-	-
TDE, p,p'-	C14H10Cl4 Responses: OV-101:	2.41 TR4 OV-17:	3.8 NI2	2.87	C	C	С	6	1
TDE, p,p'-, olefin	C14H9Cl3 Responses: OV-101:	1.45 : NI(WB)4 OV	1.36 /-17: NI4 OV	1.45 -225: NI3	C	C	С	6	1
tebuconazole	C16H22ClN3O Responses: OV-101:	3.38 : HX(WB)1 O	- V-17: HX(W	4.2 B)3	C	-	-	-	-
tebufenozide	C22H28N2O2 Responses: OV-101:	7 : NI30/NP400	-0	11	-	NR	NR	6-15-50	1-2-3
tebupirimfos	C13H23N2O3PS Responses: OV-101:	0.63 : NI16/NP1	-	-	-	V	V	6+15	2+3
tebupirimfos oxygen analog	C13H23O4N2P Responses: OV-101:	0.51 : NI100/NP1	-	-	-	NR	NR	6-15-50	1-2-3
tebuthiuron	C9H16N4OS Responses: OV-101:	0.26 : NI1000/NP(- WB)0.5 OV-1	0.21 17: FP20	-	-	-	-	-
tecnazene	C6HCl4NO2 Responses: OV-101:	0.29 TR0.5 OV-17	0.26 ': NI0.3	0.24	C	C	С	6	1
teflubenzuron*	C14H6Cl2F4N2O2	0.14	0.11 0.23	0.09 0.14	-	NR	NR	6-15-50	1-2-3
	Responses: OV-101:	: NI(WB)1.5 (OV-17: NP(W	B)5					

	Molecular	RRT/c RRT/c RRT/c			R	Recoveries			
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl ₂
ТЕРР	C8H20O7P2 Responses: OV-	0.21 101: FP(WB)46,	0.27 /NI(WB)4000	0.24 OV-17: FP(WB)70/	C NI10000/NP(WB)70	- OV-225: N	- I13700	-	-
terbacil	C9H13ClN2O2 Responses: OV- OV-225: NI(W	, , ,	2.1 /HX5/NI(WF	0.72 3)6/NP(WB)8 OV-1	C 7: HN(WB)0.6/HX(V	NR VB)5/NI(W	NR B)2/NP(W	6-15 /B)8	2+3
terbufos	C9H21O2PS3 Responses: OV-1	0.5 101: FP2/NI40/	0.44 TI2 OV-17: I	0.41 FP0.5/FP(WB)1.6/N	C I20	P	S	6	-
terbufos oxygen analog	C9H21O3PS2 Responses: OV-	0.42 101: FP0.5/NI10	- 000 OV-17: F	0.39 P1/NI2500	С	-	NR	6-15-50	1-2-3
terbufos oxygen analog sulfone	C9H21O5PS2 Responses: OV-	0.92 101: FP7/NI40	2.9 OV-17: FP2/1	1.28 NI60 OV-225: FP5/N	C N11500	NR	NR	6-15-50	1-2-3
terbufos sulfone	C9H21O4PS3 Responses: OV-1	1.2 101: FP2/NI5 <i>C</i>	- OV-17: FP2/N	1.58 I10	C	С#	С#	6-15-50	2+3
terbumeton	C10H19N5O Responses: OV	0.47 -17: NP(WB)25	0.42 OV-225: NP	0.53 20	С	-	-	-	-
terbuthylazine	C9H16N5Cl Responses: OV-	0.47 101: NI(WB)87	0.71 /NP(WB)6 C	0.48 0V-17: NI250 OV-225	C :: NI43	P	-	15+50	-
terbutryn	C10H19N5S Responses:	0.84	1.08	-	C	-	-	-	-
tetradifon	C12H6Cl4O2S Responses: OV-	5.2 101: TR6 OV-17	- 7: NI5	8.3	C	С	С	15	2
tetraiodoethylene	C2I4 Responses: OV-	0.55 101: NI(WB)3 (0.86 OV-17: NI4	1.04	-	P	P	6	-
tetramethrin*	C19H25NO4 Responses: OV-	4.3 4.5 101: NI50	8.5	7.2	С	NR	NR	6-15-50	1-2-8
tetrasul	C12H6Cl4S Responses: OV-	2.64 101: NI(WB)1 (2.33 OV-17: NI5 C	2.8 0V-225: NI3	C	C	С	6	1
tetrasul sulfoxide	C12H6Cl4OS Responses: OV-	4.7 101: NI(WB)1	8.6 OV-17: NI8 C	7.2 OV-225: NI7	-	-	-	-	-
thiabendazole	C10H7N3S Responses: OV-	1.48 101: NP90	-	2.04	C	NR	-	6-15-50	-

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

	Molecular					Rec	overies			
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
thiobencarb	C12H16CINOS Responses: OV-10	0.94 1: NI73 OV-17:	1 HX3	0.98	С		V	15	2+3	
thiometon	C6H15O2PS3 Responses: OV-10	0.41 1: NI10/NI(WB	0.51 0.3/TI1 OV-1	0.4 17: FP0.4/NP(WB)1	С	NR	NR	6-15-50	-	
thionazin	C8H13N2O3PS Responses: OV-10	0.26 1: FP0.5/TI1 C	- V-17: FP0.5	0.26	С	P	NR	15+50	-	
thionazin oxygen analog	C8H13N2O4P Responses:	-	-	-	-	-	-	-	-	
thiophanate-methyl	C12H14N4O4S2 Responses:	-	-	-	-	-	-	-	-	
ГНРІ	C8H9NO2 Responses:	0.21	-	-	С	NR	NR	6-15-50	-	
tolylfluanid	C10H13CIFNOS Responses: OV-10	1.25 1: NI3/NP70	-	1.41	С	-	-	-	-	
toxaphene*	C10H10Cl8	-	2.6 2.35	-	С	С	С	6	1	
		-	2.14	-						
		-	1.75	-						
		1.2	2.74	-						
		1.54	3.05	-						
		1.8	3.9	=						
		2.39	4.3 4.5	-						
		2.68 3.12	4.5 5.2	-						
		3.12	5.6	-						
		4.4	6	_						
		4.6	6.4	_						
		5.1	7	_						
	Responses: OV-10		,							
tralkoxydim*	C20H27NO3	3.32	-	-	V	NR	NR	50	1-2-3	
•		6.1	1.48	4.5						
	Responses: OV-10	1: NI100/NP10	OV-17: NI10	00 OV-225: NI100						
tralomethrin	C22H19Br4NO3 Responses: OV-10	27 1: NI30/NI(WB	64	44	С	V	S	15	2	
tri-allate	C10H16Cl3NOS Responses: OV-10	0.6 1: HX1/NI1.5	-	0.45	C	С	С	6	2	

	Molecular	RRT/c	RRT/c	RRT/c			Recoveries			
Name	Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl	
triadimefon	C14H16ClN3O2 Responses: OV-10	1.05 1: HX3/NI2/N	1.64 P20/NP(WB)	1)2 OV-17: HX5/HX5/	C HX(WB)3/NI(W	S# B)2/NP2/N	S# P(WB)3 C	50 OV-225: NI3/N	1-2-3 NP20	
triadimenol	C14H18ClN3O2 Responses: OV-10	1.36 1: HX10/NI90/	- /NP30/NP(W	1.44 /B)5 OV-17: HX7/HX	C (WB)4/NI(WB)5	NR 0/NP(WB)6	NR	6-15-50	-	
triazamate	C13H22N4O3S Responses: OV-10	1.58 1: NI15/NP25	2.46	2.1	С	NR	NR	6-15-50	1-2-3	
triazophos	C12H16N3O3PS Responses: OV-10	2.62 1: FP(WB)3 O	- V-17: FP5/FP	5.2 (WB)5	С	-	-	-	-	
tribufos	C12H27OPS3 Responses: OV-10	1.95 1: FP3/NP3/TI	1.65 R4 OV-17: FP	1.88 3/NI3	С	С	P	15+50	3	
tributyl phosphate	C12H27O4P Responses:	0.3	-	0.23	-	R	-	50	-	
trichlorfon	C4H8Cl3O4P Responses: OV-10	0.16 1: NP3 OV-17:	- FP4	0.13	С	NR	NR	6-15-50	1-2-3	
trichloronat	C10H12Cl3O2PS Responses: OV-10	1.13 1: FP3/HX2/N	- I2/NP3	0.97	C	С	-	6	-	
triclopyr methyl ester	C8H6Cl3NO3 Responses: OV-10	0.36 1: NI0.5/NI(W	0.36 B)0.7/NP(W	0.39 B)7	-	-	-	-	-	
tricyclazole	C9H7N3S Responses: OV-10	1.59 1: NP500/NP(V	- VB)8 OV-17:	3.9 NP500/NP(WB)8	С	-	-	-	-	
tridiphane	C10H7Cl5O Responses: OV-10	0.81 1: HX(WB)1/N	0.85 II0.8 OV-17:	0.75 HX0.8/HX(WB)0.4 O	C V-225: NI1	С	-	6	1+2	
triflumizole	C15H15ClF3N3O Responses: OV-10	1.44 1: NP(WB)4 O	2.23 V-17: HX13/	1.19 HX(WB)2/NI(WB)3/N	C NP(WB)3	-	-	-	-	
trifluralin	C13H16F3N3O4 Responses: OV-10	0.34 1: TR1 OV-17:	0.27 NI0.7	0.17	С	С	С	6	2	
triflusulfuron methyl ester	C17H19F3N6O6S Responses: OV-10	0.3 1: HN(WB)1/H	- IX(WB)20/N	0.2 II(WB)500/NP(WB)13	V OV-17: HN(WB)	NR 1/HX(WB)	NR 35/NP(WB	6-15-50 3)11	1-2-3	
tris(beta-chloroethyl) phosphate	C6H12Cl3O4P Responses: OV-10	0.45 1: FP1	-	-	С	-	-	-	-	
tris(chloropropyl) phosphate	C9H18Cl3O4P Responses: OV-10	0.5 1: FP1	2.02	0.5	С	NR	NR	6-15-50	1-2-3	

Appendix I: PESTDATA Chemicals in Order by Chemical Name (continued)

Molecular	RRT/c RRT/c RRT/c		Recoveries					
Formula	OV-101	OV-225	OV-17	302	303	304	Ethers	CH ₂ Cl
C9H16N4OS	0.77	1.62	0.99	\mathbf{C}	S	S	50	3
Responses: OV-10	1: NI1/NP2 O	V-17: NI1/NP	9 OV-225: NI1					
C8H18NO6PS2	2.19	-	-	C	-	-	-	-
Responses:								
C10H21NOS	0.15	-	0.09	-	P	-	15	-
Responses: OV-10	1: TI50 OV-17:	FP11						
C12H9Cl2NO3	0.69	1.15	0.64	C	\mathbf{C}	\mathbf{C}	15	2
Responses: OV-10	1: HX1.5/NI1	OV-17: HX1/	NI2					
C12H11Cl2NO4	0.74	1.2	0.66	C	P #	\mathbf{C}	6+15	2
	, , ,	IX(WB)18/N	I(WB)5/NP(WB)84	OV-17: HN(WB)6/	HX(WB)9/	NI(WB)10,	/NP(WB)19	
C11H11Cl2NO2	0.89	3.02	0.93	C	S	NR	15+50	-
*		IX(WB)3/NI	(WB)3/NP(WB)15	OV-17: HN(WB)3/H	IX(WB)3/N	II(WB)4/N	P(WB)7	
C11H13Cl2NO4	2.87	-	4.6	R	NR	NR	6-15-50	1-2-3
Responses: OV-10	1: HX(WB) 160	/NI(WB)57/	NP(WB)140 OV-17:	HN(WB)100/HX(V	VB)14/NI(V	VB)85/NP((WB)210	
C10H7Cl2NO3	0.69	2.01	0.79	V	P	V #	15	2
-		IX(WB)2/NI	(WB)1/NP(WB)19	OV-17: HN(WB)1/H	IX(WB)2/N	II(WB)1/N	P(WB)7	
C14H16NO2Cl3	1.44	-	-	C	C	-	50	3
D		ID/M/D\10 /II	V/MD\E					
	Formula C9H16N4OS Responses: OV-10 C8H18NO6PS2 Responses: C10H21NOS Responses: OV-10 C12H9Cl2NO3 Responses: OV-10 C12H11Cl2NO4 Responses: OV-10 OV-225: NI(WB C11H11Cl2NO2 Responses: OV-10 OV-225: NI(WB C11H13Cl2NO4 Responses: OV-10 C10H7Cl2NO3 Responses: OV-10 C10H7Cl2NO3 Responses: OV-10 OV-225: NI(WB C14H16NO2Cl3	Formula C9H16N4OS 0.77 Responses: OV-101: NI1/NP2 OV C8H18NO6PS2 2.19 Responses: C10H21NOS 0.15 Responses: OV-101: TI50 OV-17: C12H9Cl2NO3 0.69 Responses: OV-101: HX1.5/NI1 C12H11Cl2NO4 0.74 Responses: OV-101: HN(WB)5/H OV-225: NI(WB)8 C11H11Cl2NO2 0.89 Responses: OV-101: HN(WB)3/H OV-225: NI(WB)9 C11H13Cl2NO4 2.87 Responses: OV-101: HX (WB)160 C10H7Cl2NO3 0.69 Responses: OV-101: HN(WB)1/H OV-225: NI(WB)2 C14H16NO2Cl3 1.44 3.9	Formula OV-101 OV-225 C9H16N4OS 0.77 1.62 Responses: OV-101: NI1/NP2 OV-17: NI1/NP C8H18NO6PS2 2.19 Responses: - Responses: C10H21NOS 0.15 - Responses: OV-101: TI50 OV-17: FP11 C12H9Cl2NO3 0.69 1.15 Responses: OV-101: HX1.5/NI1 OV-17: HX1/ C12H11Cl2NO4 0.74 1.2 Responses: OV-101: HN(WB)5/HX(WB)18/N OV-225: NI(WB)8 C11H11Cl2NO2 0.89 3.02 Responses: OV-101: HN(WB)3/HX(WB)3/NI OV-225: NI(WB)9 C11H13Cl2NO4 2.87 - C10H7Cl2NO3 0.69 2.01 Responses: OV-101: HN(WB)1/HX(WB)2/NI OV-225: NI(WB)2 C14H16NO2Cl3 1.44 - C14H16NO2Cl3 1.44 - 3.9	Formula OV-101 OV-225 OV-17 C9H16N4OS 0.77 1.62 0.99 Responses: OV-101: NII/NP2 OV-17: NII/NP9 OV-225: NII C8H18NO6PS2 2.19 - - Responses: C10H21NOS 0.15 - 0.09 Responses: OV-101: TI50 OV-17: FP11 C12H9Cl2NO3 0.69 1.15 0.64 Responses: OV-101: HX1.5/NII OV-17: HX1/NI2 C12H11Cl2NO4 0.74 1.2 0.66 Responses: OV-101: HN(WB)5/HX(WB)18/NI(WB)5/NP(WB)84 OV-225: NI(WB)8 C11H11Cl2NO2 0.89 3.02 0.93 Responses: OV-101: HN(WB)3/HX(WB)3/NI(WB)3/NP(WB)15 OV-225: NI(WB)9 C11H13Cl2NO4 2.87 - 4.6 Responses: OV-101: HX(WB)160/NI(WB)57/NP(WB)140 OV-17: C10H7Cl2NO3 0.69 2.01 0.79 Responses: OV-101: HN(WB)1/HX(WB)2/NI(WB)1/NP(WB)19 OV-225: NI(WB)2 C14H16NO2Cl3 1.44 - -	Formula	Formula	Formula	Formula OV-101 OV-225 OV-17 OV-

Responses: OV-101:NI(WB)0.8/NP(WB)18/HX(WB)5

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time

RRT/c	RRT/c Detector Responses		c RRT/c		Molecular	Recoveries					
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂	
0.03	TR37	-	0.02	dichlorobenzene, p-	C6H4Cl2	-	\mathbf{C}	\mathbf{C}	6	1	
0.04	TR0.6	-	0.03	dibromochloropropane	C3H5Br2Cl	-	-	-	-	-	
0.06	NI30	0.08	0.04	CGA 171683	C6H5F4N3O2	\mathbf{C}		-	15+50	3	
0.06	FS9	-	-	ethiolate	C7H15NOS	\mathbf{C}	-	-	-	-	
0.07	FP(WB)0.7	0.25	0.09	methamidophos	C2H8NO2PS	V	-	-	-	-	
0.07	FP9/NI1/TI0.5	0.08	0.08	dichlorvos	C4H7Cl2O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3	
0.08	TR2	-	-	1,2,3-trichlorobenzene	C6H3Cl3	-	С	P	6	1	
0.09	TR5	-	-	allidochlor	C8H12ClNO	\mathbf{C}	NR	-	6-15	1-2-3	
0.1	NI220	-	-	methomyl	C5H10N202S	-	NR	NR	6-15-50	1-2-3	
0.1	TR175	-	-	monuron	C9H11ClN2O	-	NR	NR	6-15-50	1-2-3	
0.11	TR0.5	-	0.1	dichlobenil	C7H3Cl2N	\mathbf{C}	P	\mathbf{C}	15	2	
0.11	TR25	-	-	neburon	C12H16Cl2N2O	\mathbf{C}	NR	NR	6-15-50	1-2-3	
0.11	NI(WB)9	0.09	0.11	diuron	C9H10Cl2N2O	\mathbf{C}	NR	NR	6-15-50	1-2-3	
0.12	TI30	-	-	EPTC	C9H19NOS	-	P	-	15	-	
0.12	TR0.4	-	0.06	hexachlorocyclopentadiene	C5Cl6	-	-	-	-	-	
0.13	NI14/NI(WB)24/NP35	0.15	0.1	chlorimuron ethyl ester	C15H15CIN4O6S	P	NR	-	-	-	
0.13	FS10	0.23	0.11	carboxin sulfoxide	C12H13NO3S	-	NR	NR	6-15-50	1-2-3	
0.13	FP2/FP(WB)1	-	0.15	mevinphos, (Z)-	C7H13O6P	\mathbf{C}	NR	-	6-15-50	-	
0.13	NP(WB)2	-	0.12	propham	C10H13NO2	\mathbf{C}	P	P	15	-	
0.14	NI(WB)1.5	0.23	0.14	teflubenzuron*	C14H6Cl2F4N2O2	-	NR	NR	6-15-50	1-2-3	
0.15	FP(WB)0.9/NP3	0.64	0.19	acephate	C4H10NO3PS	\mathbf{C}	-	-	-	-	
0.15	TR7	0.24	-	hydroxy chloroneb	C7H6Cl2O2	-	NR	-	6-15	-	
0.15	TI50	-	0.09	vernolate	C10H21NOS	-	P	-	15	-	
0.15	NI300	0.15	0.14	dimethyl phthalate	C10H10O4	-	P	-	6+15+50	-	
0.16	TR35	0.14	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-	
0.16	FP2	-	0.13	mevinphos, (E)-	C7H13O6P	\mathbf{C}	NR	NR	6-15-50	-	
0.16	NP3	-	0.13	trichlorfon	C4H8Cl3O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3	
0.17	NP200	-	0.11	CGA 236431	C8H7F3N2O2	-	-	-	-	-	
0.17	NI3/NP7	0.22	0.13	3-methyl-4-nitrophenol methyl ether	C8H9O3N	-	-	-	-	-	

^{*} Multipeak chemical.

[#] Recovery may vary with choice of Florisil elution system; see Tables 303-a, 304-a.

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular	-		Recove	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.17	HX20/NI9	0.14	0.1	N-(3,4-dichlorophenyl)-N'-methylurea	C8H8Cl2N2O	-	NR	NR	6-15-50	-
0.17		-	-	metolcarb	C9H11NO2	\mathbf{C}	-	-	-	-
0.17	HN(WB)0.4/NP7	-	0.1	pebulate	C10H21NOS	\mathbf{C}	P	-	15	-
0.18	NP8	-	-	prosulfuron*	C15H16F3N5O4S	-	NR	NR	6-15-50	1-2-
0.18	NI200	-	0.22	$\hbox{$4$-hydroxymethyl-3,5-dimethylphenyl}\\ methyl carba mate*$	C11H15NO3	-	NR	NR	15-50	1-2-
0.18	NI0.25	-	-	clopyralid methyl ester	C7H4Cl2NO2	-		-	50	-
0.18	NI0.3/NP0.6	0.12	0.21	etridiazole	C5H5Cl3N2OS	\mathbf{C}	\mathbf{C}	P	6	2
0.18	HN(WB)1/HX0.5/NI9/ NI(WB)16/NP0.9/NP(WB)1	0.27	0.14	3,5-dichloroaniline	C6H5Cl2N	S	S	S	6+15	1+2
0.19	HX(WB)1.6/NI0.6	0.18	-	dicamba methyl ester	C8H6Cl2O3	-	-	-	-	-
0.19	HX(WB)2/NI600	-	-	MCPA methyl ester	C10H11ClO3	-	-	-	-	-
0.19	HX(WB)2/NI30	-	-	mecoprop methyl ester	C11H13ClO3	-	-	-	-	-
0.19	HX1/NI1/NP1	0.22	0.14	N, N-diallyl dichloroacetamide	C8H11Cl2NO	\mathbf{C}	S	S	15+50	2+
0.19	NI0.5/NI(WB)0.4/NP(WB)9	0.08	0.1	2-methoxy-3,5,6-trichloropyridine	C6H4Cl3NO	\mathbf{C}	P#	\mathbf{C}	6+15	1+
0.19		-	-	bis(trichloromethyl)disulfide	C2Cl6S2	-	R	-	6	-
0.19	NI3.5	0.19	-	chloroneb	C8H8Cl2O2	\mathbf{C}	\mathbf{C}	-	6	2
0.2	HX25/NI20	0.86	0.61	desdiethyl simazine	C3H4ClN5	-	NR	NR	6-15-50	1-2
0.2	HX2/NI(WB)0.8/NP(WB)4	0.18	0.2	nitrapyrin	C6H3Cl4N	\mathbf{C}	\mathbf{C}	\mathbf{V}	6	2
0.2		-	0.27	1,2,4-triazole	C2H3N3	V	NR	NR	6-15-50	1-2
0.2	HX0.6/NI16/NP1	0.32	0.16	3,4-dichloroaniline	C6H5Cl2N	V	S	-	15	-
0.21	HX9/NI25	-	1.36	3-(3,4-dichlorophenyl)-1-methoxyurea	a C8H8Cl2N2O2	R	NR	NR	6-15-50	-
0.21		-	-	THPI	C8H9NO2	\mathbf{C}	NR	NR	6-15-50	-
0.21	FP(WB)46/NI(WB)4000	0.27	0.24	TEPP	C8H20O7P2	\mathbf{C}	-	-	-	-
0.22	NP100	-	0.14	CGA 72903	C7H6F3N	-	-	-	-	-
0.22	NI170/NP40	0.25	0.2	3-carboxy-5-ethoxy-1,2,4-thiadiazole	C3H2N2O3S	NR	-	-	-	-
0.22	TI6	0.32	0.21	demeton-O oxygen analog	C8H19O4PS	-	-	-	-	-
0.22	HX9/NI18/NP60	0.14	0.1	3,4-dichlorophenylurea	C7H6Cl2N2O	-	NR	NR	6-15-50	-
0.22		-	-	butylate	C11H23NOS	-	-	-	-	-
0.22	NP0.5	-	0.14	CGA 150829	C5H14N4O	\mathbf{V}	-	-	-	-
0.23	TR0.6	0.21	0.18	methyl 2,3,6-trichlorobenzoate	C8H5Cl3O2	-	-	-	-	-
0.23	NI3	-	-	disul-Na	C8H7Cl2O5S•Na	-	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.24	NI0.2	0.15	0.22	2,3,5,6-tetrachloroanisole	C7H4Cl4O	-	\mathbf{C}	-	6	1
0.24	HX0.3/NI0.25	0.13	0.16	pentachlorobenzene	C6HCl5	\mathbf{C}	\mathbf{C}	С	6	1
0.25	NI100	-	-	picloram*	C6H3Cl3N2O2	-	-	-	-	-
0.25	HN(WB)1/NI(WB)23/ NP(WB)10	0.5	0.16	cymoxanil	C7H10N4O3	V	NR	NR	6-15-50	1-2-
0.25	HN(WB)0.5/NI(WB)4/ NP(WB)4	0.92	0.28	oxamyl oxime metabolite	C5H10N2O2S	С	NR	NR	6-15-50	1-2-
0.25	FP(WB)0.9/TI25	1.11	0.39	omethoate	C5H12NO4PS	\mathbf{C}	NR	NR	6-15-50	1-2-
0.26	NP20	-	0.13	CGA 236432	C9H9F3N2O2	-	-	-	-	-
0.26	NI0.5	0.51	0.23	RPA 203328, methylated	C10H9F3O4S	-	-	-	-	-
0.26	NI1000/NP(WB)0.5	-	0.21	tebuthiuron	C9H16N4OS	-	-	-	-	-
0.26	FP0.5/TI1	-	0.26	thionazin	C8H13N2O3PS	\mathbf{C}	P	NR	15+50	-
0.26	NI3500	-	-	diethyl phthalate	C12H14O4	-	P	P	15+50	-
0.27	NI200	-	0.31	4-hydroxymethyl-3,5-dimethylphenyl methylcarbamate*	C11H15NO3	-	NR	NR	15-50	1-2-
0.28	FP(WB)2	-	0.36	demeton-O*	C8H19O3PS2	\mathbf{C}	NR	-	6-15	-
0.28	HX(WB)1.6/NI2	-	-	dichlorprop methyl ester	C10H10Cl2O3	-	-	-	-	-
0.28	NP3	-	0.29	G-27550	C8H12N2O	\mathbf{C}	-	-	-	-
0.28	FP(WB)8	0.49	0.32	metasystox thiol	C6H15O3PS2	\mathbf{C}	-	-	-	-
0.29		-	0.25	diphenylamine	C12H11N	\mathbf{C}	S	-	6+15	-
0.29	TR0.5	0.26	0.24	tecnazene	C6HCl4NO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.3	TR6	0.38	0.25	2,4-D methyl ester	C9H8Cl2O3	-	-	-	-	-
0.3	NI0.4	-	-	bromoxynil methyl ether	C8H5BR2ON	-	-	-	-	-
0.3	HN(WB)6/NI1	-	-	bromofenoxim methyl ether	C14H9Br2O6N3	-	-	-	-	-
0.3	HN(WB)1/HX(WB)20/ NI(WB)500/NP(WB)13	-	0.2	triflusulfuron methyl ester	C17H19F3N6O6S	V	NR	NR	6-15-50	1-2-
0.3	HX2/NI0.4/NP8	-	-	2,4-dichloro-6-nitrobenzenamine	C6H4Cl2N2O2	-	R	-	15	2
0.3	NI400/TI2	0.37	0.29	phorate oxygen analog	C7H17O3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
0.3	FS2/NP15	-	-	cycloate	C11H21NOS	\mathbf{C}	V#	S	15+50	3
0.3	HX12/NI20	0.8	0.53	desethyl simazine	C5H8ClN5	-	NR	NR	50	1-2-
0.3		-	0.23	tributyl phosphate	C12H27O4P	-	R	-	50	-
0.31	FP6	0.49	0.32	metasystox thiono*	C6H15O3PS2	-	-	-	-	-
0.31	FP(WB)0.7/TI15	1.6	0.5	monocrotophos	C7H14NO5P	\mathbf{C}	NR	NR	6-15-50	1-2-

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.31	FP(WB)0.6/TI10	0.96	0.43	dicrotophos	C8H16NO5P	\mathbf{C}	NR	-	6-15-50	-
0.32	NI(WB)0.6/NP(WB)5	0.44	0.36	3, 5, 6-trichloro-2-pyridinol methyl ester	C6H4Cl3NO	-	-	-	-	-
0.32	NI0.4	-	-	fenac methyl ester	C9H7Cl3O2	-	-	-	-	-
0.32		-	-	chlorothalonil trichloro impurity	C8HCl3N2	R	R#	NR	6-15-50	2+3
0.32		-	-	bendiocarb	C11H13NO4	\mathbf{C}	-	-	-	-
0.32	HX2	-	-	2-chloroethyl caprate	C8H15ClO2	-	\mathbf{C}	\mathbf{C}	15	2
0.32	HN(WB)1.5	-	0.41	phenmedipham	C16H16N2O4	-	-	-	-	-
0.32	HX2	0.43	0.25	chlorpropham	C10H12ClNO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
0.33	FP0.5/HX0.3/NI0.5	0.23	0.24	chlorethoxyfos	C6H11Cl4O3PS	V	C	-	6	1
0.33	FP0.7/TI0.8	0.31	0.25	ethoprop	C8H19O2PS2	С	P#	S #	50	1-2-3
0.34	HX4/HX(WB)7/NI1	0.27	0.19	ethalfluralin	C13H14F3N3O4	C	С	\mathbf{C}	6	2
0.34		-	0.25	2,4,5-trichloro-alpha-methylbenzene methanol	C8H7OCl3	R	R	-	15	-
0.34		-	0.36	dioxabenzofos	C8H9O3PS	C	P	-	15	-
0.34	TI0.8	-	0.29	sulfotep	C8H20O5P2S2	\mathbf{C}	\mathbf{C}	P	6+15	2
0.34	NI(WB)16/NP(WB)13	0.37	0.26	propachlor	C11H14ClNO	C	NR	NR	6-15-50	1-2-3
0.34	TR1	0.27	0.17	trifluralin	C13H16F3N3O4	C	C	\mathbf{C}	6	2
0.34	NP11	-	0.32	naled	C4H7Br2Cl2O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.35	HN(WB)17/NI(WB)34/ NP(WB)600	2.85	0.4	ethametsulfuron methyl ester*	C15H18N6O6S	-	NR	NR	6-15-50	1-2-3
0.35	HN(WB)30	-	-	DNOC methyl ether	C8H8N2O5	-	-	-	-	-
0.35	HN(WB)0.5/NI320/NP15	0.7	0.41	methabenzthiazuron	C10H11N3OS	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.35	NP8	0.6	0.38	2,3,5-trimethacarb	C11H15NO2	\mathbf{C}	S#	NR	50	1-2-3
0.36	NI0.5/NI(WB)0.7/NP(WB)7	0.36	0.39	triclopyr methyl ester	C8H6Cl3NO3	-	-	-	-	-
0.37	FP(WB)0.5	0.27	0.29	cadusafos	C10H23O2PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.37	HX(WB)1.5/NI(WB)2	0.28	0.18	benfluralin	C13H16F3N3O4	С	C	\mathbf{C}	6	2
0.37	FP1/NI(WB)24/TI1	0.38	0.32	phorate	C7H17O2PS3	C	V#	V#	6	1
0.38	NI13/NP50	0.63	0.26	3-methyl-4-nitrophenol	C7H7O3N	V	NR	NR	6-15-50	1-2-3
0.38	NI(WB)1	0.44	0.36	sulfallate	C8H14CINS2	C	\mathbf{C}	C	6+15	2
0.39	NI(WB)20	1.16	0.54	4-chlorobenzylmethyl sulfoxide	C8H9ClOS	-	NR	NR	6-15-50	1-2-3
0.39		1.3	0.52	2,6-dichlorobenzamide	C7H5NOCl2	С	NR	NR	6-15-50	1-2-3

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses		Molecular			Recover	ies			
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.39		-	-	carbofuran	C12H15NO3	\mathbf{C}	-	-	-	-
0.39	NP1	0.53	0.38	fonofos oxygen analog	C10H15O2PS	V	NR	NR	6-15-50	1-2-3
0.4	NP(V)20	-	0.47	CGA 37734	C10H13NO2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.4	HX500/NI300	-	0.71	dazomet	C5H10N2S2	S	NR	-	6-15-50	1-2-3
0.4	TR0.4	0.48	0.35	BHC, alpha-	C6H6Cl6	\mathbf{C}	С	\mathbf{C}	6	1
0.4	FP(WB)0.7/NI(WB)6/NP1	1.6	0.62	dimethoate	C5H12NO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.41	FS0.5	2.71	0.81	dimethipin	C6H10O4S2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.41	NI(WB)0.4	1.91	0.66	4-chlorobenzylmethyl sulfone	C8H9ClO2S	-	NR	NR	6-15-50	1-2-3
0.41	NI10/NI(WB)3/TI1	0.51	0.4	thiometon	C6H15O2PS3	\mathbf{C}	NR	NR	6-15-50	-
0.41	FP(WB)0.8/TI2	0.56	0.41	demeton-S	C8H19O3PS2	\mathbf{C}	NR	-	6-15-50	-
0.41	NI(WB)90	0.83	0.5	simazine	C7H12ClN5	\mathbf{C}	NR	NR	50	1-2-3
0.42	HN(WB)5/NI(WB)5/ NP(WB)65	0.97	0.49	PPG-947, methylated*	C18H13ClF3NO7	-	-	-	-	-
0.42	TR10	0.74	0.33	2,4-D isopropyl ester*	C11H12Cl2O3	-	-	-	-	-
0.42	HN(WB)3/HX(WB)42/ NI(WB)35/NP(WB)14	-	0.9	pyrazon metabolite B	C6H4ClN3O	-	NR	NR	6-15-50	1-2-
0.42	FP0.5/NI1000	-	0.39	terbufos oxygen analog	C9H21O3PS2	\mathbf{C}	-	NR	6-15-50	1-2-3
0.42		0.26	0.33	di-allate	C10H17CINOS	\mathbf{C}	\mathbf{C}	-	6	-
0.42	HX4	0.75	0.45	chlorbufam	C11H10ClNO2	\mathbf{C}		-	15	2+3
0.42	NP100	-	0.42	melamine	C3H6N6	NR	-	-	-	-
0.42	TR0.5	0.96	0.45	dicloran	C6H4Cl2N2O2	\mathbf{C}	S	P	15+50	2+3
0.43	HN(WB)0.4/NI(WB)26/ NP(WB)3	1.34	0.6	6-chloro-2,3-dihydro-3,3,7-methyl-5H-oxazolo(3,2-a)pyrimidin-5-one	C9H13ClN2O2	-	NR	NR	6-15-50	1-2-3
0.43	FP100	-	0.62	fenthion oxygen analog sulfoxide	C10H15O5PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.43	TI58/TR200	0.74	0.44	atrazine	C8H14ClN5	\mathbf{C}	S#	NR	50	1-2-
0.43	TR2	1.62	0.56	BHC, beta-	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.44	NP8	2.49	0.64	prosulfuron*	C15H16F3N5O4S	-	NR	NR	6-15-50	1-2-
0.44	HN(WB)0.2/NP(WB)0.5	-	0.82	isocarbamid	C8H15N3O2	\mathbf{C}	-	-	-	-
0.44	NI1000/NP300	0.29	0.45	desmedipham	C16H16N2O4	-	-	-	-	-
0.44	HX0.8/NI0.8	1.03	-	chloramben methyl ester	C8H7Cl2NO2	-	-	-	-	-
0.45	NI8/NP35	2.25	0.71	methidathion sulfoxide	C5H8N2O4S2	-	NR	NR	6-15-50	1-2-
0.45	HX(WB)0.8/NI0.6	0.44	-	silvex methyl ester	C10H9Cl3O3	_	-	-	-	_

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

	RRT/c Detector Responses		RRT/c	•	Molecular	Recoveries					
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂	
0.45	HX1.5/HX2/NI110	0.59	0.46	clomazone	C12H14ClNO2	\mathbf{C}		-	50	3	
0.45	NP25	0.78	0.5	3,4,5-trimethacarb	C11H15NO2	\mathbf{C}	NR	NR	50	1-2-3	
0.45	HX0.5/NI0.25	0.25	0.33	hexachlorobenzene	C6Cl6	C	C	P	6	1	
0.45	FP1	-	-	tris(beta-chloroethyl) phosphate	C6H12Cl3O4P	\mathbf{C}	-	-	-	-	
0.46	NP2	-	0.49	CGA 51702	C9H9F3N2O	-	-	-	-	-	
0.46	NI1.5/NP50	0.6	0.39	furilazole	C11H13Cl2NO3	C	S	-	50	3	
0.46	HX0.4/TR0.4	0.3	0.34	pentachlorophenyl methyl ether	C7H3Cl5O	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1	
0.46		0.49	0.31	oxydemeton-methyl	C6H15O4PS2	\mathbf{C}	-	-	-	-	
0.47		0.42	0.53	terbumeton	C10H19N5O	\mathbf{C}	-	-	-	-	
0.47	NI(WB)87/NP(WB)6	0.71	0.48	terbuthylazine	C9H16N5Cl	\mathbf{C}	P	-	15+50	-	
0.47	FP(WB)0.7/NI(WB)2/NP1	-	0.59	cyanophos	C9H10O3NSP	\mathbf{C}	-	-	-	-	
0.47	NI100/TI10	-	0.5	dioxathion	C12H26O6P2S4	V	NR	-	6-15-50	2	
0.48	FP1.5	-	0.42	propetamphos	C10H20NO4PS	\mathbf{C}	С#	-	15+50	2+3	
0.48	HX4	0.91	0.48	monolinuron	C9H11ClN2O2	\mathbf{C}	-	-	-	-	
0.48	NI40	-	-	silvex	C9H7Cl3O3	-	-	-	-	-	
0.48	HX0.6/TR0.5	0.69	0.47	lindane	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1	
0.49	TR1	0.63	0.47	2,4,5-T methyl ester	C9H7Cl3O3	-	-	-	-	-	
0.49	NI0.3	0.35	0.48	1,2,4,5-tetrachloro-3-(methylthio)= benzene	C7H4Cl4S	R	С	-	6	1	
0.5	NI75	0.79	0.44	metribuzin, deaminated diketo metabolite*	C7H11N3O2	NR	NR	NR	6-15-50	1-2-3	
0.5	NI900/NP100	0.53	0.24	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-	
0.5	NI1.4/NP34	0.69	0.48	4-(dichloroacetyl)-l-oxa-4-azapiro= [4.5]decane	C10H15Cl2NO2	С	P	-	50	3	
0.5	FP1	2.02	0.5	tris(chloropropyl) phosphate	C9H18Cl3O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3	
0.5	NI0.5	0.59	0.45	pentachlorobenzonitrile	C7Cl5N	\mathbf{C}	С	P	15	2	
0.5	FP2/NI40/TI2	0.44	0.41	terbufos	C9H21O2PS3	\mathbf{C}	P	S	6	-	
0.5	NI18/NP0.6	0.53	0.47	diazinon oxygen analog	C12H21N2O4P	C	NR	NR	6-15-50	1-2-3	
0.5	HX0.5/TR0.4	1.71	0.67	BHC, delta-	C6H6Cl6	\mathbf{C}	\mathbf{C}	С	6+15	1	
0.5	NI2200/NP23	2.33	0.66	ethylenethiourea	C3H6N2S	S	NR	NR	6-15-50	1-2-3	
0.51	NI100/NP1	-	-	tebupirimfos oxygen analog	C13H23O4N2P	-	NR	NR	6-15-50	1-2-3	
0.51	FP7/NI1000/NP(WB)3.5	0.8	0.63	etrimfos oxygen analog	C10H17N2O5P	\mathbf{C}	-	-	-	_	

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c Detector Responses		RRT/c	RRT/c	Molecular	Recoveries					
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C
0.51	HX1/NI2/NP7	0.84	0.4	pronamide	C12H11Cl2NO	\mathbf{C}	P	-	15+50	-
0.51	FP(WB)1/NI3/NP0.4	0.4	0.44	diazinon	C12H21N2O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	3
0.51	TR0.3	0.46	0.46	quintozene	C6Cl5NO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.52	NI(WB)1/TI166	0.93	0.44	dinitramine	C11H13F3N4O4	\mathbf{C}	-	P	15	-
0.52	TI2	0.56	0.44	fonofos	C10H15OPS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2+3
0.53	FP10	-	0.57	phosphamidon*	C10H19ClNO5P	\mathbf{C}	NR	NR	6-15-50	1-2-
0.53	HX3/NI1.5	0.76	0.37	fluchloralin	C12H13ClF3N3O4	\mathbf{C}	\mathbf{C}	-	6	2
0.53	HX5/NI1/NP1	0.46	0.3	profluralin	C14H16F3N3O4	V	V	-	6	-
0.53	NI(WB)110/TI30	0.65	0.41	propazine	C9H16ClN5	\mathbf{C}	S	NR	15+50	3
0.54	HX2.5/NI1000	-	0.66	4-chloro-6-methoxyindole	C9H8NOCl	-	R	-	15	-
0.54	NP5/NP(WB)6	1.47	0.62	fenfuram	C12H11NO2	\mathbf{C}	-	-	-	-
0.54	HN(WB)1/HX5/NI(WB)6/ NP(WB)8	2.1	0.72	terbacil	C9H13ClN2O2	С	NR	NR	6-15	2+
0.54	NI(WB)15	-	1.07	4-chlorophenylurea	C7H7ClN2O	NR	NR	NR	6-15-50	1-2
0.54	TI2	0.6	0.46	disulfoton	C8H19O2PS3	\mathbf{C}	P#	NR	6	1-2
0.55	HN(WB)17/NI(WB)34/ NP(WB)600	3.6	0.95	ethametsulfuron methyl ester*	C15H18N6O6S	-	NR	NR	6-15-50	1-2
0.55	NI30/NP0.4	0.8	0.63	isazofos	C9H17ClN3O3PS	\mathbf{C}	С#	-	50	2+
0.55	HN(WB)17/NI(WB)15/ NP(WB)9	1.41	0.9	3-ketocarbofuran	C12H12NO4	S	NR	NR	6	1
0.55	HX1/NI0.6	1.44	0.74	chlorothalonil	C8Cl4N2	S	С#	C#	6-15-50	2-
0.55	TI5/TR11	1.71	0.66	parathion-methyl oxygen analog	C8H10NO6P	-	NR	NR	6-15-50	1-2
0.55	NI(WB)3	0.86	1.04	tetraiodoethylene	C2I4	-	P	P	6	-
0.55	NI2	0.92	-	dichlone	C10H4Cl2O2	P	S#	S #	6-15-50	2-
0.56	NI(WB)2	0.49	0.47	methyl 3,5-dibromo-4-methoxy= benzoate	C9H8Br2O3	-	-	-	-	•
0.56	NI150/NP100	2.29	0.82	methidathion sulfone	C5H8N2O3S2	-	NR	NR	6-15-50	1-2
0.56	NI35/NP40	1.41	0.55	metribuzin, diketo metabolite	C7H12N4O2	NR	NR	NR	6-15-50	1-2
0.56	NI(WB)1	0.4	0.32	chlordene	C10H6Cl6	-	\mathbf{C}	\mathbf{C}	6	1
0.56	NI0.4	0.63	0.56	2,3,5,6-tetrachloronitroanisole	C7H3Cl4NO3	-	\mathbf{C}	-	6	1+
0.56	NP10	-	-	aminocarb	C11H16N2O2	\mathbf{C}	-	-	-	
0.57	NI0.5/NP2	1.47	0.91	metribuzin	C8H14N4OS	V	NR	NR	50	1-2
0.58	NP10	-	0.68	cyromazine	C6H10N6	S	-	-	-	-

RRT/c	Detector Responses				Molecular			Recov	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.58	FP2/NI50	0.59	0.51	etrimfos	C10H17N2O4PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2+3
0.58	FP4/TI5	-	0.52	schradan	C8H24N4O3P2	C	NR	-	6-15-50	-
0.59	NI0.5	0.73	0.66	2,3,5,6-tetrachloroanisidine	C7H5Cl4NO	-	C	-	6	2
0.59	HX2	-	-	2-chloroethyl laurate	C14H27ClO2	-	С	С	15	2
0.6	NI200/NP200	2.65	0.9	CGA 120844	C8H9NSO3	-	NR	NR	6-15-50	1-2-3
0.6	FP20/FP400/FS1.5/ HN(WB)3.5/NI950/NP(WB	1.4 3)4	0.78	ethiofencarb	C10H15NO2S	С	NR	NR	6-15-50	-
0.6	FP(WB)1	-	0.54	iprobenfos	C13H21O3PS	C	-	-	-	-
0.6	HX1/NI1.5	-	0.45	tri-allate	C10H16Cl3NOS	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
0.6	NI20/NP15	1.64	0.7	ethoxyquin	C14H19N0	C	NR	NR	6-15-50	-
0.61	NI2	-	-	fluroxypyr, methylated*	C8H7O3N2Cl2F	-	-	-	-	-
0.61		-	0.73	pirimicarb	C11H18N4O2	\mathbf{C}	-	-	-	-
0.62	TR28	0.72	-	2,4-DB methyl ester	C11H12Cl2O3	-	-	-	-	-
0.62	TR5	0.62	0.49	2,4-D isobutyl ester	C12H14Cl2O3	-	-	-	-	-
0.63	HN1/NI1.2	-	-	dinoseb methyl ether	C11H14N2O5	-	-	-	-	-
0.63	NI16/NP1	-	-	tebupirimfos	C13H23N2O3PS	-	V	V	6+15	2+3
0.64	NI1/NP6	1.06	0.7	benoxacor	C11H11Cl2NO2	\mathbf{C}	P	\mathbf{C}	15+50	2+3
0.64	HX1.5/NI13	1.22	0.74	cyprazine	C9H14ClN5	C	-	-	-	-
0.64	NP3	1.02	0.62	ronnel oxygen analog	C8H8Cl3O4P	C	NR	-	6-15-50	-
0.65	NI20	0.61	0.56	diisobutyl phthalate	C16H2204	-	P	-	15+50	-
0.66	FS4	-	0.64	octhilinone	C11H19NOS	\mathbf{C}	-	-	-	-
0.66	FP1/TI10	-	1.02	phorate oxygen analog sulfone	C7H17O5PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.66	HX6/NI3/NI(WB)5	2.82	0.78	propanil	C9H9Cl2NO	\mathbf{C}	NR	NR	6-15	3
0.67	FP10	-	0.76	phosphamidon*	C10H19ClNO5P	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.67	NI100	-	-	picloram*	C6H3Cl3N2O2	-	-	-	-	-
0.67	NP(WB)0.5	-	-	pyrimethanil	C12H13N3	C	S	S #	50	3
0.67	HX8/NI5	1.44	0.69	metobromuron	C9H11BrN2O2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.67	HX0.5/NI0.4/NP10	0.79	0.66	pentachloroaniline	C6H2Cl5N	\mathbf{C}	C	\mathbf{C}	6	1
0.67	FP1/FP(WB)3.5/NI1.9/TI2	0.64	0.56	dichlofenthion	C10H13Cl2O3PS	\mathbf{C}	C	V	6	2
0.67	TR2	0.65	-	2,4,5-T isopropyl ester	C11H11Cl3O3	-	-	-	-	-
0.68	TR35	0.66	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
0.68	FS25/NI4	2.89	0.93	2,3-dihydro-3,3-methyl-2-oxo-5-	C11H12O5S	-	-	-	-	-

\
τ
T
Z
드
×

Appendix I:	PESTDATA	Chemicals in	Order by	v <i>OV-101</i>	Relative	Retention	Time	(continued)
, ippoliant li			0, 40, 8	, , , , , ,	1 10140110	1 10001101011	1 11 1 10	(COLIUITACA)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ies	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
				benzofuranyl methyl sulfonate						
0.68	TI7	1.55	0.87	malathion oxygen analog	C10H19O7PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.69	TR60	0.74	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
0.69	HN(WB)1/HX(WB)2/ NI(WB)1/NP(WB)19	2.01	0.79	vinclozolin metabolite S	C10H7Cl2NO3	V	P	V #	15	2
0.69	HX1.5/NI1	1.15	0.64	vinclozolin	C12H9Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
0.69		-	-	chlorthiamid	C7H5Cl2NS	-	-	-	-	-
0.7	NP13	-	0.58	CP 51214	C14H21NO3	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.7	HN(WB)0.6/NP(WB)23	-	0.8	IN-B2838	C10H15N3O3	P	NR	NR	6-15-50	1-2-3
0.71	FP5/TI12	2.95	0.96	demeton-O sulfone*	C8H19O5PS2	\mathbf{C}	-	-	-	-
0.71	HN(WB)5/NI1	-	-	ioxynil methyl ether	C8H5I2NO	-	-	-	-	-
0.71	NI30	1.11	0.71	dimethachlor	C13H18ClNO2	\mathbf{C}	-	-	-	-
0.71	HN(WB)0.5/NP(WB)3	-	0.95	fuberidazole	C11H8N2O	\mathbf{C}	-	-	-	-
0.71	FP(WB)0.9/NI(WB)3/NP1.5	1.64	0.87	parathion-methyl	C8H10NO5PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
0.72		-	-	DDM	C13H10Cl2	-	-	-	-	-
0.72	NI(WB)19/NP(WB)14	0.98	-	dimethenamid	C12H18ClNO2S	-	NR	NR	6-15-50	1-2-3
0.72	FP(WB)2	-	1.48	oxydemeton-methyl sulfone	C6H15O5PS2	C	-	-	-	-
0.72	FP1/FP(WB)1.3/HX1.5/ NI1/NP1	0.86	0.79	chlorpyrifos-methyl	C7H7Cl3NO3PS	С	С	-	6	2
0.72	FP3	-	0.83	fenitrothion oxygen analog	C9H12NO6P	\mathbf{C}	-	-	-	-
0.72	TR40	-	-	2,4-D n-butyl ester	C12H14Cl2O3	-	-	-	-	-
0.73	NI75	1.29	0.52	metribuzin, deaminated diketo metabolite*	C7H11N3O2	NR	NR	NR	6-15-50	1-2-3
0.73	NP6	-	0.67	CP 108064, methylated	C15H21NO4	-	-	-	-	-
0.73	NP2	-	0.89	cymiazole	C12H14N2S	-	-	-	-	-
0.74	HN(WB)5/HX(WB)18/ NI(WB)5/NP(WB)84	1.2	0.66	vinclozolin metabolite B	C12H11Cl2NO4	С	P #	С	6+15	2
0.75	HX(WB)1.2/NI1.5/TR1	2.67	-	picloram methyl ester	C7H5Cl3N2O2	-	-	-	-	-
0.75	HX5/NI9/NP5	0.88	0.67	acetochlor	C14H20NO2Cl	\mathbf{C}	С#	P	50	3
0.75	NI2/NP2	0.8	0.68	CGA 14128	C12H21N2O4PS	\mathbf{C}		-	50	1-2-3
0.75	FP1/NI5	1.55	0.79	prothoate	C9H20NO3PS2	\mathbf{C}	-	-	-	-
0.75	NP60	-	1.05	carbaryl	C12H11NO2	\mathbf{C}	-	-	-	-
0.77	NI1/NP2	1.62	0.99	Tycor	C9H16N4OS	С	S	S	50	3

RRT/c	Detector Responses	RRT/c	RRT/c	,	Molecular			Recove	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.77	FP200/NI40/TI50	-	0.74	prometryn	C10H19N5S	\mathbf{C}	P #	P #	50	1-2-3
0.77		1.1	-	ametryn	C9H17N5S	\mathbf{C}	-	-	-	-
0.78	NI300	-	1.06	phorate oxygen analog sulfoxide	C7H17O4PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.78	FP7	-	1.12	fenthion oxygen analog	C10H15O4PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.78	NI0.5/NP7.5	-	-	bromoxynil butyrate	C11H9Br2NO2	-	V	-	15+50	2
0.79	NI2	-	-	fluroxypyr, methylated*	C8H7O3N2Cl2F	-	-	-	-	-
0.8	HN(WB)1.2/HX(WB)90/ NI(WB)1.5/NP(WB)10	2.1	-	bromacil methyl ether	C10H16BrN2O2	-	-	-	-	-
0.8	NP200	-	1.03	3-hydroxymethyl-2,5-dimethylphenyl methylcarbamate	C11H15NO3	-	NR	NR	6-15-50	1-2-3
0.8	NI(WB)7	1	0.72	alachlor	C14H2OCINO2	\mathbf{C}	C	C#	50	3
0.8	NI200/NP200	-	1.17	methiocarb sulfone	C11H15NO4S	S	NR	NR	6-15-50	1-2-3
0.8	HN(WB)2/NI(WB)2/ NP(WB)17	4.8	1.36	bromacil	C9H13BrN2O2	С	NR	NR	6-15-50	1-2-3
0.8	NI(WB)5/NP3	-	0.86	parathion oxygen analog	C10H14NO6P	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.81	HX(WB)1/NI0.8	0.85	0.75	tridiphane	C10H7Cl5O	\mathbf{C}	C	-	6	1+2
0.81	HX1000/NI1000/NP7	-	0.9	metalaxyl	C15H21NO4	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.81	HX16/NI300	0.85	-	chloroxuron	C15H15ClN2O2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.81	NI(WB)1/TI3	0.86	0.76	ronnel	C8H8Cl3O3PS	\mathbf{C}	C	\mathbf{C}	6	2
0.82	TR2	0.64	0.67	chlordene, alpha-	C10H6Cl6	-	-	-	-	-
0.82	TR4	1.07	0.92	dichlorobenzophenone, o,p'-	C13H8Cl2O	-	C	\mathbf{C}	15	2
0.83	TR5	-	-	Compound K*	C10H6Cl8	-	C	-	-	1
0.83		-	-	DDNU	C14H10Cl2	-	-	-	-	-
0.83		-	-	DDNS	C14H12Cl2	-	-	-	-	-
0.83	NI60/NP45	3.77	1.06	metribuzin, deaminated metabolite	C8H13N3OS	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.83	NI0.6	0.52	0.6	heptachlor	C10H5Cl7	\mathbf{C}	C	\mathbf{C}	6	1
0.84	NI50	-	-	sethoxydim sulfoxide	C17H29NO4S	-	NR	NR	6-15-50	3
0.84	NI0.6	0.65	-	chlordene epoxide	C10H6Cl6O	-	\mathbf{C}	-	15	-
0.84		1.08	-	terbutryn	C10H19N5S	\mathbf{C}	-	-	-	-
0.84	FP(WB)1/NP1	1.82	1.05	fenitrothion	C9H12NO5PS	\mathbf{C}	C	C	15	2
0.85	TR28	2.13	0.95	linuron	C9H10Cl2N2O2	V	V#	V	50	3
0.86	NI5	-	-	dicofol, o,p'-*	C14H9Cl5O	\mathbf{C}	V	S	6+15	2

Appendix I:	PESTDATA Che	emicals in Order	r bv OV-101	Relative	Retention	Time	(continued)
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, . , . , . , . , . ,		~, ~,				[00,,0,,,0,0,,

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.86	HN(WB)4/HX(WB)11/ NI(WB)28/NP(WB)17	-	1.55	6-chloro-2,3-dihydro-7-hydroxy= methyl-3,3-methyl-5H-oxazolo= (3,2-a)pyrimidin-5-one	C9H13CIN2O3	-	NR	NR	6-15-50	1-2-
0.86	FS32/NI315	1.93	1.02	ethofumesate	C13H18O5S	\mathbf{C}	-	-	-	-
0.86	FP5	-	-	phoxim oxygen analog	C12H15N204P	C	-	-	-	-
0.87	HX7/NI1100	-	1.07	4-chlorophenoxyaniline*	C12H10CINO	S	-	-	-	-
0.87	FP4	-	1.05	demeton-O sulfoxide	C8H15O4PS2	\mathbf{C}	-	-	-	-
0.87	FP2/FP(WB)1.2/NI100/NP2	-	0.92	pirimiphos-methyl	C11H20N3O3PS	\mathbf{C}	C	\mathbf{C}	15	3
0.88		-	-	methiocarb	C11H15NO2S	\mathbf{C}	-	-	-	-
0.88	NI30	0.92	0.84	dibutyl phthalate	C16H22O4	-	C	\mathbf{C}	15+50	-
0.89	HN(WB)3/HX(WB)3/ NI(WB)3/NP(WB)15	3.02	0.93	vinclozolin metabolite E	C11H11Cl2NO2	С	S	NR	15+50	-
0.89	NI4/TI26	4.9	1.48	cyanazine	C9H13ClN6	\mathbf{C}	NR	-	6-15-50	-
0.89	FP5/NI8/NP4	2.55	1.26	phorate sulfoxide	C7H17O3PS3	\mathbf{C}	NR	NR	6-15-50	1-2-
0.9	NP400	-	0.45	formetanate hydrochloride	C11H16ClN3O2	-	-	-	-	-
0.9	NI1/NP44	1.71	1.01	dichlofluanid	C9H11Cl2FN2O2S2	\mathbf{C}	С#	-	15+50	2+
0.91	TR850	-	-	diisooctyl phthalate*	C24H38O4	-	C	\mathbf{C}	15+50	-
0.91	NI(WB)7/NP1	1.49	1.05	malathion	C10H19O6PS2	\mathbf{C}	С	\mathbf{C}	15+50	3
0.92	FP7/NI40	2.9	1.28	terbufos oxygen analog sulfone	C9H21O5PS2	\mathbf{C}	NR	NR	6-15-50	1-2
0.93	FP(WB)5	-	1.43	des N-isopropyl isofenphos oxygen analog	C12H18NO5P	-	-	-	-	-
0.94	TR1	-	-	2,4,5-T isobutyl ester	C12H13Cl3O3	-	-	-	-	-
0.94		0.97	0.66	prodiamine	C13H17F3N4O4	\mathbf{C}	-	-	-	-
0.94	NI73	1	0.98	thiobencarb	C12H16CINOS	\mathbf{C}		V	15	2+
0.94	HX0.7/NI0.4	0.69	0.87	pentachlorophenyl methyl sulfide	C7H3Cl5S	C	C	\mathbf{C}	6	1
0.95	FP27/NI6/TI8	1.51	1.08	chlorpyrifos oxygen analog	C9H11Cl3NO4P	C	NR	-	6-15-50	-
0.96	HX5/NI1	1.45	0.86	nitrofluorfen	C13H7ClF3NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
0.96		-	1.32	carbetamide	C12H16N2O3	-	-	-	-	-
0.96	FP2/TI4	1.46	1.18	fenthion	C10H15O3PS2	C	S#	NR	6+15	1-2-
0.97	HX13/NI40	1.46	-	methazole	C9H6Cl2N2O3	-	-	-	-	-
0.97	HN(WB)5	-	0.96	difenoxuron	C16H18N2O3	-	-	-	-	-
0.97	NI4/TI4	3.26	1.3	phorate sulfone	C7H17O4PS3	\mathbf{C}	S #	S #	6-15-50	3
0.98	TR1	0.84	0.89	chlordene, beta-	C10H6Cl6	-	-	-	-	-

RRT/c	Detector Responses	RRT/c	RRT/c	•	Molecular			Recove	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.98	TR2	0.89	0.88	chlordene, gamma-	C10H6Cl6	-	-	-	-	-
0.98	TI340	-	-	desmethyl diphenamid	C15H15NO	-	-	-	-	-
0.98	NI(WB)4/NP2	1.91	1.07	parathion	C10H14NO5PS	\mathbf{C}	С	\mathbf{C}	15	2
0.99	NI1	-	-	benazolin methyl ester	C9H6O3SNCl	-	-	-	-	-
0.99	NI3/NP35	1.91	0.96	KWG 1323	C14H16ClN3O3	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.99	NI(WB)7	1.63	1.07	1-hydroxychlordene	C10H6Cl6O	-	R	-	15	-
0.99	TR3	1.25	1.08	dichlorobenzophenone, p,p'-	C13H8Cl2O	-	\mathbf{C}	\mathbf{C}	15	2
1	FS48/NI135	6.6	1.46	2-hydroxy-2,3-dihydro-3,3-methyl-5- benzofuranyl methyl sulfonate	C11H14O5S	-	-	-	-	-
1	NI1.5/TI3	1	1	chlorpyrifos	C9H11Cl3NO3PS	\mathbf{C}	С	P	6	2
1.01	FP4/FP(WB)1.6	-	1.14	pirimiphos-ethyl oxygen analog	C13H24N3O4P	\mathbf{C}	-	-	-	-
1.03	HX5/NI12	1.21	0.93	metolachlor	C15H22ClNO2	\mathbf{C}	S#	NR	50	1-2-3
1.04	NI5	-	-	dicofol, p,p'-*	C14H9Cl5O	\mathbf{C}	V	P #	6+15	1+2
1.04	HN(WB)620/NI(WB)1000	-	1.13	PPG-947	C17H11ClF3NO7	-	NR	NR	6-15-50	1-2-3
1.05	NI220	1	-	PP 890	C9H10O2ClF3	-	-	-	-	-
1.05	HN(WB)170/HX(WB)980/ NI(WB)40/NP(WB)270	1.47	0.88	acifluorfen	C14H7ClF3NO3	-	NR	NR	6-15-50	1-2-3
1.05	HX3/NI2/NP20/NP(WB)2	1.64	1	triadimefon	C14H16ClN3O2	\mathbf{C}	S#	S #	50	1-2-3
1.05	HN(WB)1.4	-	1.43	pyracarbolid	C13H15NO2	-	-	-	-	-
1.05	TR0.8	0.58	0.76	aldrin	C12H8Cl6	\mathbf{C}	С	\mathbf{C}	6	1
1.06	NI1	1.13	1	DCPA	C10H6Cl4O4	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
1.07	NI100/NP40	-	1.8	methidathion oxygen analog	C6H11N2O5PS2	-	NR	NR	6-15-50	1-2-3
1.07		-	-	3-chloro-5-methyl-4-nitro-1H-pyrazole	C4H4ClN3O2	\mathbf{C}	-	-	-	-
1.08	TR35	0.91	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
1.08	FP100/NI1000/NP40	3	1.66	fosthiazate	C9H18NO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.08	TI6	2.33	1.3	crufomate	C12H19ClNO3P	\mathbf{C}	NR	NR	6-15-50	-
1.09	NP33	-	0.62	fenpropimorph	C20H33NO	\mathbf{C}		-	50	1-2-3
1.1	NI(WB)2	-	0.68	nitrothal-isopropyl	C14H17O6N	\mathbf{C}	-	-	-	-
1.1		-	1.55	diphenamid	C16H17NO	\mathbf{V}	NR	-	6-15	-
1.1	TR1	-	-	2,4,5-T n-butyl ester	C12H13Cl3O3	-	-	-	-	-
1.11	NI40/NP100	4.7	1.33	isoxaflutole (prop)	C15H12SNO4F3	NR	V#	S#	50	3
1.11	FP3/NI(WB)1/TI3	1.29	1.16	bromophos	C8H8BrCl2O3PS	\mathbf{C}	C	\mathbf{C}	6	-

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c	-	Molecular			Recover	ries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
1.13	NI40/NP120	4.7	1.38	RPA202248	C15H12SNO4F3	NR	NR	NR	6-15-50	1-2-3
1.13	FP3/HX2/NI2/NP3	-	0.97	trichloronat	C10H12Cl3O2PS	\mathbf{C}	\mathbf{C}	-	6	-
1.14	NI2/NP3	1.24	1.01	isopropalin	C15H23N3O4	\mathbf{C}	\mathbf{C}	-	6	-
1.14	FP2/TI4/TR150	1.03	1.14	pirimiphos-ethyl	C13H24N3O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15+50	3
1.15	NI3	4.3	1.54	CGA 91305	C10H8Cl2N3O	\mathbf{V}	NR	NR	6-15-50	1-2-
1.15	NI7/NP3	1.22	0.93	butralin	C14H21N3O4	V	\mathbf{C}	-	6+15+50	-
1.15	FP40/TI20	5.8	1.75	demeton-S sulfone	C8H19O5PS2	\mathbf{C}	-	-	-	-
1.16	HN(WB)1.4	-	1.56	phenothiazine	C12H9NS	-	-	-	-	-
1.17	HX4	-	-	2-chloroethyl myristate	C16H31ClO2	\mathbf{C}	V	V	15	2
1.17	FP10	1.74	1.24	isofenphos oxygen analog	C15H24NO5P	\mathbf{C}	-	-	-	-
1.17	MC25/NI200	-	-	methyl 4-chloro-1H-indole-3-acetate	C11H10ClNO2	R	R #	NR	50	1-2-
1.18	NP(WB)2	-	1.39	cyprodinil	C14H15N3	\mathbf{C}	NR	NR	6-15-50	1-2-
1.19	TR12	1.15	1.2	TDE, o,p'-, olefin	C14H9Cl3	-	-	-	-	-
1.2	FP2/NI5	-	1.58	terbufos sulfone	C9H21O4PS3	\mathbf{C}	С#	С#	6-15-50	2+3
1.2	TR2	3.49	1.85	captan	C9H8Cl3NO2S	\mathbf{C}	P	С	50	3
1.21	FP2	2.73	1.5	des N-isopropyl isofenphos	C12H18NO4PS	\mathbf{C}	S	-	50	-
1.21	FP10/FP(WB)1.7/ NI(WB)2/TI4	1.58	1.29	chlorfenvinphos, alpha-	C12H14Cl3O4P	С	-	NR	6-15-50	-
1.22	NI3/NP5	1.48	1.21	pendimethalin	C13H19N3O4	\mathbf{C}	\mathbf{C}	P	15	2
1.23	NI(WB)1	3.01	1.94	folpet	C9H4Cl3O2NS	\mathbf{C}	\mathbf{C}	P	15+50	2+3
1.24	NP(WB)3	-	1.32	penconazole	C13H15Cl2N3	\mathbf{C}	-	-	-	-
1.24	HX(WB)8/NI4	1.88	1.47	anilazine	C9H5Cl3N4	V	S	P	15+50	2+3
1.25	NI2/NP8	8	1.09	MB45950	C12H4SN4F6Cl2	S	P	V	15+50	2+3
1.25	NI3/NP70	-	1.41	tolylfluanid	C10H13ClFNOS	\mathbf{C}	-	-	-	-
1.26	TR4	3.5	1.92	Sulphenone	C12H9ClO2S	\mathbf{C}		-	50	3
1.27	HX12/NI19	3.39	1.42	chlorbromuron	C9H10BrClN2O2	V	V	V	50	3
1.28	HX7/NI1100	-	1.31	4-chlorophenoxyaniline*	C12H10ClNO	S	-	-	-	-
1.28	NI(WB)70/NP(WB)90	-	2.41	hexythiazox	C17H21ClN2O2S	-	S#	NR	50	2+3
1.28	NI1000	-	1.6	3-phenoxybenzenemethanol	C13H12O2	-	-	-	-	-
1.28	FP(WB)1.7/NI5	2.67	1.58	mecarbam	C10H20NO5PS2	\mathbf{C}		-	50	-
1.29	FP2/FP(WB)1.8/HX3/ NI(WB)2/TI4	2	1.52	chlorfenvinphos, beta-	C12H14Cl3O4P	C	S #	-	50	1-2-

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recov	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
1.29	HX0.7/TR1	1.22	1.15	heptachlor epoxide	C10H5Cl7O	С	С	С	6	2
1.3	NI50	8.9	-	chlorsulfuron	C12H12ClN5O4S	-	NR	NR	6-15-50	-
1.31	FP(WB)2/NI5/TI3	2.05	1.83	phenthoate	C12H17O4PS2	\mathbf{C}	С	-	15+50	-
1.32	FP5/FP(WB)2.7	2	1.64	quinalphos	C12H15N2O3PS	\mathbf{C}	С	-	15	-
1.33	TR1	0.94	1.05	octachlor epoxide	C10H4Cl8O	\mathbf{C}	С	С	6	1
1.34	FP3/TI5	0.65	1.43	merphos*	C12H27PS3	-	С	С	6+15+50) 3
1.35	HN(WB)4/HX(WB)40/ NI(WB)67/NP(WB)39	2.27	2.55	3-tert-butyl-5-chloro-6-hydroxy= methyluracil	C9H13ClN2O3	-	NR	NR	6-15-50	1-2-3
1.35	NI2/NP10	8.7	1.16	fipronil	C12H4Cl2F6N4OS	S	S	V	50	3
1.36	HX10/NI90/NP30/NP(WB)	5 -	1.44	triadimenol	C14H18ClN3O2	\mathbf{C}	NR	NR	6-15-50	-
1.36	FP2/NI20	1.73	1.38	isofenphos	C15H24NO4PS	\mathbf{C}	C	-	15+50	-
1.36	NI8	1.22	-	allethrin	C19H26O3	-	С	С#	50	3
1.37	NI12	3.04	1.49	procymidone	C13H11Cl2NO2	\mathbf{C}	\mathbf{C}	P	15	-
1.37	NI2	1.22	1.12	S-bioallethrin	C19H26O3	-	С	-	50	-
1.37	NI60/TI10	2.85	1.9	crotoxyphos	C14H19O6P	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.39	NI1000	1.89	1.54	CGA 189138	C13H8O3Cl2	-	-	-	-	-
1.39	NI6	1.62	1.54	chlorbenside	C13H10Cl2S	\mathbf{C}	S	P	6	1
1.4	NI500/NP500	-	-	WAK4103*	C9H9N5O3Cl	-	NR	NR	6-15-50	1-2-3
1.4	HN(WB)1.5	-	1.32	dinobuton	C14H18N2O7	\mathbf{C}	-	-	-	-
1.4	FP5/FP(WB)1.6/NP3	3.33	2.28	methidathion	C6H11N2O4PS3	\mathbf{C}	S	P #	50	3
1.41	HN(WB)1.6/NP(WB)51	-	2.55	IN-T3936	C10H15N3O4	S	NR	NR	6-15-50	1-2-3
1.42	NI2800	3.7	-	fenac	C8H5Cl3O2	-	NR	NR	6-15-50	-
1.43	TR2	-	-	photodieldrin B	C13H9Cl5O	-	-	-	-	-
1.44	NP(WB)4	2.23	1.19	triflumizole	C15H15ClF3N3O	\mathbf{C}	-	-	-	-
1.44 1.44	TR60 NI(WB)0.8/NP(WB)18/ HX(WB)5	-	-	4-(2,4-dichlorophenoxy)benzenam zoxamide*	ine C12H9Cl2NO C14H16NO2Cl3	- C	- C	- -	50	3
1.45	NI(WB)4	1.36	1.45	TDE, p,p'-, olefin	C14H9Cl3	С	С	С	6	1
1.47	(1,2/2	-	-	DDMU	C14H9Cl3	-	-	-	-	-
1.48	NP90	_	2.04	thiabendazole	C10H7N3S	С	NR	_	6-15-50	_
1.49	TR1	1.46	1.34	chlordane, trans-	C10H6Cl8	C	С	C	6	1
1.5	NI34	-	1.46	metazachlor	C14H16ClN3O	C	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c	·	Molecular			Recover	ries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
1.5		7.9	-	procyazine	C10H13ClN6	С	-	-	-	-
1.5	NI3/NP22	4.3	2.67	TCMTB	C9H6N2S3	С	P	P	15	-
1.5	TI7	6.7	2.39	disulfoton sulfone	C8H19O4PS3	\mathbf{C}	NR	-	6-15-50	-
1.51	FP3/NI3/TI4	1.42	1.45	bromophos-ethyl	C10H12BrCl2O3PS	\mathbf{C}	\mathbf{C}	P	6	-
1.52	NP(WB)6	-	1.59	paclobutrazol	C15H20ClN3O	\mathbf{C}	-	-	-	-
1.53	NI5/NP150	6.5	2.41	CGA 94689A	C15H21NO5	V	NR	NR	6-15-50	1-2-3
1.53	TR40	0.95	-	Perthane olefin	C18H19Cl	-	\mathbf{C}	\mathbf{C}	6	1
1.54	TR20	3.6	-	2,4-D propylene glycol butyl ether ester*	C15H2OCl2O4	-	-	-	-	-
1.54	NI12/NP150	6.6	2.45	CGA 94689B	C15H21NO5	S	NR	NR	6-15-50	1-2-3
1.55	HX(WB)9/NI5	-	1.4	haloxyfop methyl ester	C16H13ClF3NO4	-	-	-	-	-
1.55	TR2	1.28	1.51	DDE, o,p'-	C14H8Cl4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.57	NI5/NP30	1.84	1.64	cyclanilide methyl ester	C12H11Cl2NO3	-	-	-	-	-
1.57	NI(WB)1	-	1.85	oxythioquinox	C10H6N2OS2	\mathbf{C}	-	-	-	-
1.58	NI15/NP25	2.46	2.1	triazamate	C13H22N4O3S	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.58	FP9/TI8	2.72	1.97	Gardona	C10H9Cl4O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.58	TI400	-	-	promecarb	C12H17NO2	V	-	-	-	-
1.59	NI550/NP210	-	-	NTN35884*	C9H9N5O2Cl	-	NR	NR	6-15-50	1-2-3
1.59	NP500/NP(WB)8	-	3.9	tricyclazole	C9H7N3S	\mathbf{C}	-	-	-	-
1.6	FS(WB)10/NI(WB)3	4.1	3.17	isoprothiolane	C12H18O4S2	\mathbf{C}	-	-	-	-
1.6		-	-	MGK 264	C17H25NO2	-	-	-	-	-
1.61	HX4/TR3	3.04	2.2	ovex	C12H8Cl2O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
1.64	HX1/NI1.3	1.38	1.47	endosulfan I	C9H6Cl6O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
1.65		-	1.65	DDMS	C14H11Cl3	-	R	-	6	-
1.66	TR60	1.18	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
1.66	FP8/NP8	3.7	2.41	fenamiphos	C13H22NO3PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.66	TR1	1.54	1.48	chlordane, cis-	C10H6Cl8	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.7	NP40	-	2.12	napropamide	C17H20NO2	\mathbf{C}	-	-	-	-
1.73	HX9	1.83	1.46	butachlor	C17H26ClNO2	\mathbf{C}	\mathbf{C}	-	50	-
1.73	HX8/NI3	-	1.88	chlorflurecol methyl ester	C15H11ClO3	\mathbf{C}	-	-	-	-
1.75	TR2	1.45	1.42	nonachlor, trans-	C10H5Cl9	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.76	NI30/NP(WB)12	4	2.08	imazalil	C14H14Cl2N2O	\mathbf{C}	NR	NR	6-15-50	-

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recov	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
1.77	FP(WB)4	-	-	fenthion oxygen analog sulfone*	C10H15O6PS2	-	-	-	-	-
1.78	HX11/NI10/NP180	3.14	2	diethatyl-ethyl	C16H22ClNO3	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.79	HX540/HX(WB)50/NI45/ NP(WB)40	3.5	2.76	imazamethabenz methyl ester*	C16H20N2O3	С	-	-	-	-
1.8	NP100	-	2.96	CGA 100255	C15H12NO5	S	-	-	-	-
1.8	FP7/FP(WB)2.6/NI3	2.34	2.13	profenofos	C11H15BrClO3PS	\mathbf{C}	P	P	50	3
1.82	TR12	2.08	1.79	2,4-D butoxyethyl ester*	C14H18Cl2O4	-	-	-	-	-
1.84	NI200/NP50	-	-	imidacloprid	C9H10ClN5O2	-	NR	NR	6-15-50	1-2-3
1.85	FP4/NI3/NP3	1.74	1.82	prothiofos	C11H15Cl2PO2S2	\mathbf{C}	С	\mathbf{C}	6	2
1.86	HX6/NI3	2.91	1.79	hexaconazole	C14H17Cl2N3O	\mathbf{C}	-	-	-	-
1.87	FS50	-	-	carboxin	C12H13NO2S	\mathbf{C}	NR	NR	6-15-50	-
1.88	NI25	-	1.99	pretilachlor	C17H26ClNO2	\mathbf{C}	-	-	-	-
1.88	NP1	4.1	-	ethion oxygen analog	C9H22O5P2S3	\mathbf{C}	-	-	-	-
1.9	HN(WB)58/HX(WB)110/ NI(WB)85/NP(WB)150	3.16	1.86	PPG-2597	C20H17ClF3NO6	-	NR	NR	6-15-50	1-2-3
1.9	HN(WB)0.7/NI25/NP(WB)7	7.2	2.6	myclobutanil	C15H17ClN4	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.9	TR2	2.46	2.19	TDE, o,p'-	C14H10Cl4	-	С	\mathbf{C}	6	1
1.91	HX1/NI1.5	1.87	1.84	dieldrin	C12H8Cl6O	\mathbf{C}	С	\mathbf{C}	15	2
1.92	NI1.5	1.59	1.86	DDE, p,p'-	C14H8Cl4	\mathbf{C}	C	С	6	1
1.94	HX8/NI7	-	2.45	flamprop-methyl	C17H15ClFNO3	\mathbf{C}	-	-	-	-
1.95	FP3/TI5	1.64	1.88	merphos*	C12H27PS3	-	С	С	6+15+50	3
1.95	FP3/NP3/TR4	1.65	1.88	tribufos	C12H27OPS3	\mathbf{C}	С	P	15+50	3
1.97	NP(WB)5	-	2.33	flusilazole	C16H15F2N3Si	\mathbf{C}	-	-	-	-
1.97	HX4/NI4	2.48	1.96	oxadiazon	C15H18Cl2N2O3	\mathbf{C}	\mathbf{C}	P	15	-
1.99	TI45	-	3.8	fensulfothion oxygen analog sulfone	C11H17O7PS2	-	-	-	-	-
2	TR60	1.79	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
2	NI900/NP100	0.93	0.44	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
2	FP600/TR10000	2.77	-	aramite*	C15H23ClO4S	\mathbf{C}	P	NR	15	-
2	NI5	4	2.16	oxyfluorfen	C15H11ClF3NO4	\mathbf{C}	С	\mathbf{C}	15	2
2	FS(WB)20/NI(WB)8	3.7	2.6	bupirimate	C13H24N4SO3	\mathbf{C}	-	-	-	-
2	NI(WB)10/NP(WB)50	3.02	3.38	kresoxim-methyl	C18H19NO4	P	\mathbf{C}	\mathbf{C}	15+50	3
2.02	HX7/NI7/NP(WB)8	3.4	2.03	diclobutrazol	C15H19Cl2N3O	\mathbf{C}	NR	NR	6-15-50	1-2-3

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
2.02	NP7	1.21	-	simetryn	C8H15N5S	\mathbf{C}	-	-	-	-
2.03	NI(WB)1	3.8	2.71	nitrofen	C12H7Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
2.04	TR50	1.78	1.78	2,4-D isooctyl ester*	C16H22Cl2O3	-	-	-	-	-
2.04	HN(WB)182/HX(WB)73/ NI(WB)72/NP(WB)12	1.61	2.69	cyproconazole	C15H18ClN3O	С	NR	NR	6-15-50	1-2-3
2.06	NI2/NP30	31	1.98	MB46136	C12H4SO2N4F6Cl2	S	S	V	50	2+3
2.07	NP189	-	2.92	methoprotryne	C11H21N5OS	\mathbf{C}	-	-	-	-
2.1	NI5	1.78	1.68	2,4-D ethyl hexyl ester*	C16H22Cl2O3	-	-	-	-	-
2.12	NI25	1.76	1.76	pyrethrins*	C21H27O4	-	\mathbf{C}	\mathbf{C}	50	-
2.13	TR2	2.22	2.29	endrin	C12H8Cl6O	C	С#	C#	15	2
2.14	HN(WB)5/NI(WB)5/ NP(WB)65	5	2.4	PPG-947, methylated*	C18H13ClF3NO7	-	-	-	-	-
2.14	NI100	-	-	mirex, 5,10-dihydro-*	C10H2Cl10	-	-	-	-	-
2.14	FP600/TR10000	3.05	-	aramite*	C15H23ClO4S	\mathbf{C}	P	NR	15	-
2.15	HN(WB)3/HX(WB)10/ NI(WB)3/NP(WB)34	5	2.4	PPG-847, methylated	C15H9ClF3NO3	-	-	-	-	-
2.17	NI6/TI15	4.2	3.06	carbophenothion oxygen analog	C11H16ClO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
2.19		-	-	vamidothion sulfone	C8H18NO6PS2	\mathbf{C}	-	-	-	-
2.19	NI(WB)1	4.2	2.38	binapacryl	C15H18N2O6	\mathbf{C}	P	P	15	-
2.21	NI2/NP50	-	2.34	chlorfenapyr (prop)	C15H11BrClF3N2O	P	-	S	50	2
2.21	HX2/NI2	3.9	2.77	endosulfan II	C9H6Cl6O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15+50	2
2.22	HX9/NI6	4.1	2.99	chlorthiophos oxygen analog	C11H15Cl2O4PS	\mathbf{C}	NR	NR	6-15-50	1-2-
2.23	TR150	2.01	2.42	Perthane	C18H2OCl2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
2.24	FP8	-	2.58	chlorthiophos*	C11H15Cl2O3PS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
2.24	NI20	-	-	metamitron	C10H10N4O	-	-	-	-	-
2.26	FP54	-	4.4	famphur oxygen analog	C10H16NO6PS	\mathbf{C}	-	-	-	-
2.28	NI1.5	-	-	methyl 2,3,5-triiodobenzoate	C8H5I3O2	-	-	-	-	-
2.29	FP(WB)4	-	4.1	fenthion oxygen analog sulfone*	C10H15O6PS2	-	-	-	-	-
2.3	HX19/HX(WB)18/NI125	2.36	2.31	fluazifop butyl ester	C19H20F3NO4	\mathbf{C}	\mathbf{C}	V	15	3
2.31	NI20/NP50	15	3.93	desisopropyl iprodione	C10H6Cl2N3O3	P		-	50	1-2-
2.31	TR70	3.26	2.61	chlorobenzilate	C16H14Cl2O3	\mathbf{C}	С#	P#	15+50	3
2.33	TR8	5.8	-	Dilan*	C15.5H14Cl2NO2	-	P	P	15	-

RRT/c OV-101	Detector Responses with OV-101 Column	RRT/c OV-225	RRT/c OV-17	Name	Molecular Formula	Recoveries				
						302	303	304	Ethers	CH ₂ Cl
2.33	TR80	2.9	2.41	chloropropylate	C17H16Cl2O3	P	С	С	15+50	3
2.35	TR4	-	-	endrin aldehyde	C12H8Cl6O	\mathbf{C}	P	\mathbf{C}	15+50	-
2.35	HX10	-	-	2-chloroethyl palmitate	C18H35ClO2	-	V	P	15	2
2.36	FP8	-	2.77	chlorthiophos*	C11H15Cl2O3PS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
2.36	NP(WB)12	-	-	etaconazole*	C14H15Cl2N3O2	\mathbf{C}	-	-	-	-
2.37		-	-	2,4,5-T propylene glycol butyl ether esters	C15H19Cl3O4	-	-	-	-	-
2.38	NI(WB)2/TI5	3.24	3.14	leptophos photoproduct	C13H11Cl2O2PS	\mathbf{C}	-	-	-	-
2.39	FP22	-	4.7	fenthion sulfone	C10H15O5PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
2.4	NI120/NP50	4.3	3	imazethapyr ammonium salt methyl ester	C16H21N3O3	-	-	-	-	-
2.4	TI12	-	3.8	fensulfothion	C11H17O4PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
2.41	NI4	-	-	2,8-dihydromirex	C10H2Cl10	-	C	-	6	-
2.41	TR4	3.8	2.87	TDE, p,p'-	C14H10Cl4	\mathbf{C}	C	\mathbf{C}	6	1
2.43	NP(WB)12	-	3.17	etaconazole*	C14H15Cl2N3O2	\mathbf{C}	-	-	-	-
2.43	NP60	-	4.5	benodanil	C13H10INO	\mathbf{C}	-	-	-	-
2.45	TR340	-	-	diisohexyl phthalate*	C20H30O4	-	\mathbf{C}	-	15+50	-
2.46	HX9/NI9	-	2.81	flamprop-M-isopropyl	C19H19ClFNO3	\mathbf{C}	-	-	-	-
2.47	NI100	-	-	mirex, 5,10-dihydro-*	C10H2Cl10	-	-	-	-	-
2.49	TI10	-	5	fensulfothion oxygen analog	C11H17O5PS	\mathbf{C}	NR	-	6-15-50	-
2.5	NI1700/NP8	14	5	oxadixyl	C14H18N2O4	\mathbf{C}	NR	NR	6-15-50	1-2-3
2.51	HN(WB)1/HX(WB)12/ NI(WB)9/NP(WB)90	4	4.2	pyrithiobac-sodium methyl ester	C14H13ClN2O4	-	-	-	-	-
2.52	HX1/NI2	3.33	2.61	nonachlor, cis-	C10H5Cl9	\mathbf{C}	C	\mathbf{C}	6	1
2.53	TR5	2.66	-	Compound K*	C10H6Cl8	-	\mathbf{C}	-	-	1
2.55	NI(V)250	-	-	hydramethylnon*	C25H24F6N4	-	-	-	-	-
2.55	TR4	-	-	endrin alcohol	C12H8Cl6O	-	P	\mathbf{C}	15+50	2+3
2.55	TR4	2.27	2.7	DDT, o,p'-	C14H9Cl5	\mathbf{C}	С	\mathbf{C}	6	1
2.56	FP8	-	3.16	chlorthiophos*	C11H15Cl2O3PS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
2.56	TR20	3.1	-	2,4,5-T isooctyl ester*	C16H21Cl3O3	-	-	-	-	-
2.56	FP(WB)1.9/NI(WB)3/NP2	3.93	3.36	ethion	C9H22O4P2S4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
2.62	HX(WB)260	-	-	pyrazon metabolite A	C16H18ClN3O6	-	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued
--

RRT/c	Detector Responses	RRT/c	RRT/c	•	Molecular			Recover	ies	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
2.62	HX17	18.6	5.4	ofurace	C14H16NO3Cl	\mathbf{C}	-	-	-	-
2.62	FP(WB)3	-	5.2	triazophos	C12H16N3O3PS	\mathbf{C}	-	-	-	-
2.64	NI(WB)1	2.33	2.8	tetrasul	C12H6Cl4S	\mathbf{C}	С	\mathbf{C}	6	1
2.65	FP8/TI40	14	5	famphur	C10H16NO5PS2	\mathbf{C}	NR	-	6-15-50	-
2.66	TR340	-	-	diisohexyl phthalate*	C20H30O4	-	C	-	15+50	-
2.67	NI7	-	-	10,10-dihydromirex	C10H2Cl10	-	C	-	6	-
2.67	HN(WB)8/HX(WB)30/ NI(WB)26/NP(WB)56	13	8	pyrazon	C10H8ClN3O	С	NR	NR	6-15-50	1-2-
2.72	NI500/NP500	-	-	WAK4103*	C9H9N5O3Cl	-	NR	NR	6-15-50	1-2-
2.75	NI(WB)2	1.67	2.38	chlordecone	C10H8Cl10O5	-	S#	P#	15+50	1-2-
2.78	FP(WB)14	-	3.6	sulprofos sulfoxide*	C12H19O3PS3	\mathbf{C}	-	-	-	-
2.79	FP(WB)47	-	3.5	sulprofos	C12H19O2PS3	\mathbf{C}	-	-	-	-
2.8	NI9/NP7	-	3.6	fensulfothion sulfone	C11H17O5PS2	\mathbf{C}	NR	-	6-15-50	-
2.81	TR8	7.5	-	Dilan*	C15.5H14Cl2NO2	-	P	P	15	-
2.81	NI(WB)1	7.5	3.9	Prolan	C15H13Cl2NO2	P	S	S	15	2
2.83	HX4/TR5	8.3	4	endosulfan sulfate	C9H6Cl6O4S	\mathbf{C}	\mathbf{C}	\mathbf{C}	50	2
2.85	TR35	1.19	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
2.85	TR5	4.7	-	chlornitrofen	C12H6Cl3NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	6+15	2
2.87	HX(WB)160/NI(WB)57/ NP(WB)140	-	4.6	vinclozolin metabolite F	C11H13Cl2NO4	R	NR	NR	6-15-50	1-2-
2.87	FP(WB)4/NI(WB)4	6.3	5.3	edifenphos	C14H15O2PS2	\mathbf{C}	-	-	-	-
2.9	TR340	-	-	diisohexyl phthalate*	C20H30O4	-	\mathbf{C}	-	15+50	-
2.9		-	3.7	1,1'-(2,2-dichloroethylidene)bis(2-methoxybenzene)	C16H16Cl2O2	-	R	-	-	-
2.91	TR4	3.3	-	2,4,5-T butoxyethyl ester*	C14H17Cl3O4	-	-	-	-	-
2.91	HN(WB)3/NP(WB)15	-	-	hexazinone	C12H20N4O2	P	NR	NR	6-15-50	1-2
2.94	TI15/TR4	4.2	3.7	carbophenothion	C11H16ClO2PS3	\mathbf{C}	C	P	6	2
2.95	NI25	2.84	2.7	pyrethrins*	C21H27O4	-	\mathbf{C}	\mathbf{C}	50	-
2.96	TR20	3.4	-	2,4,5-T isooctyl ester*	C16H21Cl3O3	-	-	-	-	-
2.96	NI15/NP50	11.5	4.1	CL 202,347	C13H19N3O5	-	-	-	-	-
2.97	NI(WB)8	3.7	4.2	methoxychlor olefin	C16H14Cl2O2	\mathbf{C}	C	\mathbf{C}	6	2
3	NP300	-	1.18	NTN33823	C9H11N4Cl	-	NR	NR	6-15-50	1-2

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular	Recoveries				
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
3.03	NI170	2.74	2.88	ethephon	C2H6ClO3P	NR		-	6+15+50	1+2+
3.06	NI10/NI(WB)17	-	-	propiconazole*	C15H17Cl2N3O2	\mathbf{C}	NR	NR	6-15-50	1-2-3
3.06	HN(WB)1.4/NP(WB)29	-	-	IN-A3928	C11H18N4O2	S	NR	NR	6-15-50	1-2-
3.06	NI(WB)1	7.5	4.4	Bulan	C16H15Cl2NO2	\mathbf{C}	P	P	15	2
3.06	NI35	5.1	4.5	butyl benzyl phthalate	C19H20O4	-	С	P	15+50	-
3.1	NI900/NP100	14.8	7.1	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
3.1	FP3.5/NI3/NP(WB)3	8.2	4.6	cyanofenphos	C15H14NO2PS	\mathbf{C}	-	-	-	-
3.1	NI(WB)2/NP(WB)220	-	3.7	fenhexamid	C14H17Cl2NO2	NR	NR	NR	6-15-50	1-2-
3.11	NI3	-	5.4	captafol	C10H9Cl4NO2S	\mathbf{C}	P	-	50	3
3.13	TR4	3.6	3.5	DDT, p,p'-	C14H9Cl5	\mathbf{C}	С	\mathbf{C}	6	1
3.14	NI4/NP40	-	-	bromoxynil octanoate	C15H17Br2NO2	-	V#	-	15+50	2
3.21	NI100	-	-	mirex, 5,10-dihydro-*	C10H2Cl10	-	-	-	-	-
3.21	NI10/NI(WB)17	5.6	4	propiconazole*	C15H17Cl2N3O2	\mathbf{C}	NR	NR	6-15-50	1-2
3.22	TR60	2.09	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
3.25	TR20	3.8	-	2,4,5-T isooctyl ester*	C16H21Cl3O3	-	-	-	-	-
3.26	NP(WB)30	5.8	4.67	clodinafop-propargyl	C17H13CIFNO4	\mathbf{V}	V	-	50	3
3.27	TR340	-	-	diisohexyl phthalate*	C20H30O4	-	\mathbf{C}	-	15+50	-
3.28	FS(WB)17/HN(WB)3/ NP(WB)130	-	9.4	oxycarboxin	C12H13NO4S	R	-	-	-	-
3.3	TR35	2.78	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
3.3	NI(WB)0.1/NP(WB)37	-	7.5	3-desmethyl sulfentrazone	C10H8Cl2F2N4O3S	-	NR	NR	6-15-50	1-2
3.3	NI(WB)2	4.5	5	methoxychlor, o, p'-	C16H15Cl3O2	-	\mathbf{C}	-	6	-
3.32	NI100/NP10	-	-	tralkoxydim*	C20H27NO3	V	NR	NR	50	1-2
3.34	NI50	-	-	sethoxydim	C17H29NO3S	-	NR	NR	6-15-50	3
3.36	NI5	7.3	4.8	nuarimol	C17H12ClFN2O	\mathbf{C}	NR	C#	50	1-2
3.38	HX(WB)3/NI27	1.41	4.9	desmethyl norflurazon	C11H7ClF3N3O	V	NR	NR	6-15-50	1-2
3.38	HX(WB)1	-	4.2	tebuconazole	C16H22ClN3O	\mathbf{C}	-	-	-	-
3.38	NI5	-	2.62	2,4,5-T ethylhexyl ester	C16H21Cl3O3	-	-	-	-	-
3.39	TR8	8.2	-	Dilan*	C15.5H14Cl2NO2	-	P	P	15	-
3.57	HX8/NI10	4.9	4.7	diclofop-methyl	C16H14Cl2O4	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
3.6	NI60	37.1	7.5	myclobutanil alcohol metabolite	C15H17CIN40	S	NR	NR	6-15-50	1-2
3.6	TR5	10.3	-	endrin ketone	C12H8Cl6O	_	\mathbf{C}	\mathbf{C}	50	2

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C
3.7	FP20	-	10.1	azinphos-methyl oxygen analog	C10H12N3O4PS	\mathbf{C}	-	-	-	-
3.74	NI5	-	-	8-monohydromirex	C10HCl11	-	\mathbf{C}	-	6	-
3.8	FP600/FP(WB)8/NI160	-	6.2	phosalone oxygen analog	C12H15CINO5PS	\mathbf{C}	-	-	-	-
3.8	NI36/TI35	-	7.1	carbophenothion oxygen analog sulfone	C11H16ClO5PS2	-	-	-	-	-
3.8	NI(WB)1	24	6.3	nitralin	C13H19N3O6S	\mathbf{C}	P	P	50	3
3.8	FS45/NI(WB)230	4.8	4.3	propargite	C19H26O4S	\mathbf{C}	\mathbf{C}	-	15	2
3.9	NI(WB)0.8/NP(WB)18/ HX(WB)5	-	-	zoxamide*	C14H16NO2Cl3	С	С	-	50	3
4	NI(WB)6	-	3.9	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
4	NI1000/NP1000	15	4.2	KWG 1342	C14H18ClN3O3	-	-	-	-	-
4	NI(WB)2/NP19	14.9	8.4	phosmet	C11H12O4NPS2	\mathbf{C}	NR	-	6-15-50	2
4.1	TR60	5.1	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
4.1	NI5	1.08	0.91	dicofol, o,p'-*	C14H9Cl5O	\mathbf{C}	V	S	6+15	2
4.1	HX15	-	-	2-chloroethyl linoleate	C20H35ClO2	-	V	P	15	2
4.2	HX13/NI15/NP15	18	6.3	iprodione*	C13H13Cl2N3O3	\mathbf{C}	S#	NR	50	1-2
4.2	FP60/TI65	7.6	6.5	leptophos oxygen analog	C13H10BrCl2O3P	\mathbf{C}	-	-	-	-
4.2	TI250	-	2.87	carbophenothion oxygen analog sulfoxide	C11H16ClO4PS2	-	-	-	-	-
4.2	NI(WB)16	14	8.7	pyridaphenthion	C14H17O4N2SP	\mathbf{C}	-	-	-	-
4.26	NI7	-	-	10-monohydromirex	C10HCl11	-	\mathbf{C}	-	6	-
4.3	NI100	-	-	mirex, 5,10-dihydro-*	C10H2Cl10	-	-	-	-	-
4.3	NI50	-	-	tetramethrin*	C19H25NO4	\mathbf{C}	NR	NR	6-15-50	1-2
4.3	NI(WB)6	6.9	4.4	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
4.3	NI(WB)3	8.4	6	benzoylprop-ethyl	C18H17Cl2NO3	P	NR	NR	6-15-50	1-2
4.4	NI5	1.28	1.08	dicofol, p,p'-*	C14H9Cl5O	\mathbf{C}	\mathbf{V}	P#	6+15	1+
4.4	TR12	6.5	-	bromopropylate	C17H16Br2O3	\mathbf{C}	С#	C#	15+50	1-2
4.4	TR6	15.5	8.5	photodieldrin	C12H8Cl6O	-	\mathbf{C}	\mathbf{C}	15+50	2
4.5	NI50	8.5	7.2	tetramethrin*	C19H25NO4	\mathbf{C}	NR	NR	6-15-50	1-2
4.5	FP50/NP20	-	8.4	fenamiphos sulfone	C13H22NO5PS	\mathbf{C}	NR	NR	6-15-50	1-2
4.5	HX50	-	5.01	norflurazon	C12H9ClF3N3O	\mathbf{V}	NR	NR	6-15-50	-
4.5	NI0.5/TI16	10.6	6.9	EPN	C14H14NO4PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	eries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C
4.6	HX8	-	-	fenarimol metabolite C	C17H14N2OCl2	S		-	6	-
4.6	HX19	-	-	fenarimol metabolite B	C17H14N2OCl2	NR	NR	NR	6-15-50	-
4.7	NI500/NP500	-	-	WAK4103*	C9H9N5O3Cl	-	NR	NR	6-15-50	1-2
4.7	HN(WB)390/NI(WB)400	-	-	IN-T3937	C12H20N4O3	S	-	-	-	-
4.7	HN(WB)73/NI(WB)230	-		IN-T3935	C11H18N4O3	S	-	-	-	-
4.7	HX20/NI6	10.3	6.9	chlorthiophos sulfoxide	C11H15Cl2O4PS2	\mathbf{C}	NR	NR	6-15-50	1-2
4.7	NI(WB)1	8.6	7.2	tetrasul sulfoxide	C12H6Cl4OS	-	-	-	-	-
4.7	NI8800	-	-	oryzalin	C12H8N4O6S	-	NR	NR	6-15-50	-
4.7	NI(WB)12	53	11.3	dithianon	C14H4O2N2S2	NR	-	-	-	-
4.7	TR9	7.2	7.2	methoxychlor, p, p'-	C16H15Cl3O2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
4.8	NI(WB)6	7.7	4.8	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
4.8	NI7/NI(WB)0.2/NP30	7	5.7	fenpropathrin	C22H23NO3	-	V#	\mathbf{V}	15	2
4.8	FP15	9.7	6.8	piperophos	C14H28NO3PS2	\mathbf{C}	-	-	-	
4.8	NP(WB)40	6.6	6.3	cloquintocet-mexyl	C18H22ClNO3	\mathbf{V}	NR	-	6-15-50	1-
4.9	NI8	3.8	4.5	bifenthrin	C23H22ClF3O2	V	C	-	6+15	:
5	NI550/NP210	-	-	NTN35884*	C9H9N5O2Cl	-	NR	NR	6-15-50	1-5
5	NP50	-	7.3	fenoxycarb	C17H19NO4	\mathbf{C}	-	-	-	
5	HX16/NI4	14.9	8.8	bifenox	C12H9Cl2NO5	\mathbf{C}	\mathbf{C}	P	15+50	2
5.1	NI(WB)6	9.5	5.6	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	
5.1	FP(WB)80	-	10.6	sulprofos oxygen analog sulfone	C12H19O5PS2	\mathbf{C}	-	-	-	
5.1	FP3/TI20	-	9.2	carbophenothion sulfone	C11H16ClO4PS3	\mathbf{C}	C	P	6]
5.2	FP50/NP55	-	8.1	fenamiphos sulfoxide	C13H22N04PS	\mathbf{C}	NR	NR	6-15-50	1-2
5.2	TR6	-	8.3	tetradifon	C12H6Cl4O2S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	
5.2	TI30/TR50	-	11.8	azinphos-methyl	C10H12N3O3PS2	\mathbf{C}	NR	NR	6-15-50	1-2
5.3	TR35	3.28	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	
5.3	HX20/NI9	18.8	9.1	chlorthiophos sulfone	C11H15Cl2O5PS2	\mathbf{C}	\mathbf{C}	-	50	:
5.3	HX(WB)20/NI1000	-	7.5	iprodione metabolite isomer	C13H13Cl2N3O3	\mathbf{C}	S	-	50	
5.4	NI500/NI(WB)40	4.8	6.5	phenothrin*	C23H26O3	-	-	-	-	-
5.4	NP20	-	5.3	carbosulfan	C20H32N2O3S	P	-	-	-	
5.4	FP3/TI35	-	4	carbophenothion sulfoxide	C11H16ClO3PS3	-	-	-	-	
5.5	TR850	-	-	diisooctyl phthalate*	C24H38O4	-	\mathbf{C}	\mathbf{C}	15+50	-
5.5	NP10/TR15	5.5	9.1	phosalone	C12H15ClNO4PS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	50	2+

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c	•	Molecular			Recover	ries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
5.8	FP14/TI20/TR11	7.7	8.5	leptophos	C13H10BrCl2O2PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
5.8	NI7	2.95	5.6	mirex	C10Cl12	P	\mathbf{C}	P	6	1
5.9	HN(WB)10.5/HX20/NI100	-	9.8	clofentezine	C14H8Cl2N4	R	S	-	15	2
6.1	NI100/NP10	1.48	4.5	tralkoxydim*	C20H27NO3	V	NR	NR	50	1-2-3
6.1	FP(WB)14	-	11.7	sulprofos sulfoxide*	C12H19O3PS3	C	-	-	-	-
6.2	TR850	-	-	diisooctyl phthalate*	C24H38O4	-	C	С	15+50	-
6.4	NI(V)200	4.5	6.1	bis(2-ethylhexyl) phthalate	C24H38O4	-	\mathbf{C}	\mathbf{C}	15+50	-
6.5		-	11.5	myclobutanil dihydroxy metabolite	C15H17N4O2Cl	NR	NR	NR	6-15-50	1-2-3
6.5	TI30/TR28	-	14.3	dialifor	C14H17CINO4PS2	\mathbf{C}	\mathbf{C}	P	15	2
6.6	HX10/NI5	-	10.1	fenarimol	C17H12Cl2N2O	\mathbf{C}	P#	С#	50	3
6.6	TR500	-	-	n-acetyl nitrofen	C14H11Cl2NO2	-	-	-	-	-
6.7	TR850	-	-	diisooctyl phthalate*	C24H38O4	-	\mathbf{C}	\mathbf{C}	15+50	-
6.7	NI1000	-	1.59	CGA 205375	C16H13N3O2Cl2	-	-	-	-	-
6.7	NI13	-	-	PPG-1576	C19H17ClF3NO5	-	-	P	50	2+3
6.9	TI58/TR200	-	14.8	azinphos-ethyl	C12H16N3O3PS2	\mathbf{C}	P	S	50	3
7	TR35	7.7	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
7	NI30/NP4000	-	11	tebufenozide	C22H28N2O2	-	NR	NR	6-15-50	1-2-3
7	NI40	-	11.4	CGA 118244	C15H13Cl2N3O3	V	NR	NR	6-15-50	1-2-3
7.2	FP(WB)16	-	13.1	sulprofos sulfone	C12H19O4PS3	\mathbf{C}	-	-	-	-
7.3	NI10	-	-	lactofen	C19H15ClF3NO7	-	-	\mathbf{C}	50	2+3
7.4	NI10	-	8	lambda-cyhalothrin	C23H19ClF3NO3	\mathbf{C}	-	-	-	-
7.5	TR850	-	-	diisooctyl phthalate*	C24H38O4	-	С	\mathbf{C}	15+50	-
7.9	NI90/NP300	-	-	RH-6467*	C19H15N4ClO	S	NR	NR	6-15-50	1-2-3
7.9	NI20	10.8	12.6	HOE-030291	C17H16Cl2O5	-	-	-	-	-
8	NI200/NP130	45	16	coumaphos oxygen analog	C14H16ClO6P	\mathbf{C}	NR	NR	6-15-50	1-2-3
8.1	NI250	11.3	10.5	fenoxaprop ethyl ester	C18H16NO5Cl	S	V	V	50	3
8.1	FP(WB)12	-	13	pyrazophos	C14H20N3O5PS	\mathbf{C}	-	-	-	-
9	TR850	-	-	diisooctyl phthalate*	C24H38O4	-	С	\mathbf{C}	15+50	-
9	NI39/NP38	40	18	coumaphos	C14H16ClO5PS	\mathbf{C}	NR	С#	6-15-50	3
9.4		-	11.8	bitertanol*	C20H23N3O2	\mathbf{C}	-	-	-	-
9.4	NI75	11.1	13.8	permethrin, cis-	C21H20Cl2O3	\mathbf{C}	V#	\mathbf{C}	6+15	2
9.5	FP100/NI(WB)9/TI190	-	20.2	bensulide	C14H24NO4PS3	\mathbf{C}	P	\mathbf{C}	50	3

APPENDIX I

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)	Appendix I:	PESTDATA Chemica	als in Order by OV-101	l Relative Retention	Time (continued)
---	-------------	------------------	------------------------	----------------------	------------------

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular	Recoverie					
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C	
9.7		-	12.5	bitertanol*	C20H23N3O2	\mathbf{C}	-	-	-	-	
9.7	TR7	-	-	hexachlorophene dimethyl ether	C15H10Cl6O2	-	NR	NR	6-15	-	
9.8	NI1000/NP70	-	-	fenbuconazole	C19H17ClN4	\mathbf{C}	NR	NR	6-15-50	1-2	
10.2	TR60	13	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-	
10.2	NI100	13	15	permethrin, trans-	C21H20Cl2O3	\mathbf{C}	V#	\mathbf{C}	6+15	2	
10.4	NI90/NP300	-	-	RH-6467*	C19H15N4ClO	S	NR	NR	6-15-50	1-2	
10.4	NI15/NP125	12.8	8.9	acrinathrin	C26H21F6NO5	V	V	$V^{\#}$	15	9	
10.4	HX50/NI12	-	15.4	prochloraz	C15H16Cl3N3O2	\mathbf{C}	-	-	-	-	
10.5	TR850	-	-	diisooctyl phthalate*	C24H38O4	-	C	\mathbf{C}	15+50		
11.5	NI500/NI(WB)40	10.9	15	phenothrin*	C23H26O3	-	-	-	-		
11.7	HX30/NI30	-	-	cyfluthrin*	C22H18Cl2FNO3	\mathbf{C}	P	-	15		
12	NI50	8.9	6.1	CGA 205374	C16H11N3O2Cl2	-	NR	NR	6-15-50	1-	
12	NI50/NP170	-	-	RH-9130	C19H16N3ClO2	P	NR	NR	6-15-50	1-	
12	NI(V)330	-	-	di-n-octyl phthalate	C24H38O4	-	С	\mathbf{C}	15+50		
12.4	NP(WB)14	-	-	flumetsulam, methylated	C13H11F2N5O2S	-	-	-	-		
12.5	HX30/NI30	-	-	cyfluthrin*	C22H18Cl2FNO3	\mathbf{C}	P	-	15		
12.8	HX30/NI30	-	-	cyfluthrin*	C22H18Cl2FNO3	\mathbf{C}	P	-	15		
13	NI(WB)2	13	16	hexachlorophene	C13H6Cl6O2	-	NR	NR	6-15-50		
13.6	HX70/NI80	-	25	quizalofop ethyl ester	C19H17ClN2O4	\mathbf{C}	-	-	-		
14	NI40/NP190	-	-	RH-9129	C19H16N3ClO2	V	NR	NR	6-15-50	1-	
14	HX9/NI22	-	-	alpha-cypermethrin	C22H19Cl2O3N	\mathbf{C}	\mathbf{C}	-	-		
14	NI(WB)90	-	-	azafenidin	C15H13Cl2N3O2	V	-	-	-		
14.1	NI90	33	23	cypermethrin*	C22H19Cl2NO3	\mathbf{C}	С	\mathbf{C}	15		
14.7	NI40/NI(WB)15	36.9	21.4	flucythrinate*	C26H23F2NO4	\mathbf{C}	C	-	15	2	
15	NI90/NP300	-	-	RH-6467*	C19H15N4ClO	S	NR	NR	6-15-50	1-	
15.1	NI90	36	25	cypermethrin*	C22H19Cl2NO3	\mathbf{C}	С	\mathbf{C}	15		
16.1	NI40/NI(WB)15	42	24	flucythrinate*	C26H23F2NO4	\mathbf{C}	С	-	15	2	
16.3	HX400/NI1500	24	-	fluridone	C19H14F3NO	-	NR	NR	6-15-50		
17	NI200	-	6.2	deltamethrin, trans-*	C22H19Br2NO3	-	P#	NR	15		
17.1	NI1300	-	21	deltamethrin*	C22H19Br2NO3	\mathbf{C}	S#	P	15		
20.3	NI90	44	35	fenvalerate*	C25H22ClNO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15		
20.7	NI500/NP500	-	_	WAK4103*	C9H9N5O3Cl	_	NR	NR	6-15-50	1-	

Appendix I: PESTDATA Chemicals in Order by OV-101 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular	Recoveries			ries	
OV-101	with OV-101 Column	OV-225	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
22.5	NI90	51	40	fenvalerate*	C25H22CINO3	С	\mathbf{C}	\mathbf{C}	15	2
22.5	NI90	-	-	esfenvalerate	C25H22ClNO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
23	NI150/NP300	57	43	PB-7, methylated	C20H25ClN2O3S	-	-	-	-	-
25		59	38	fluvalinate*	C26H22ClF3N2O3	\mathbf{C}	С	-	15	2
25	NI300/NP500	87	46	PB-9	C19H25ClN2O2S	V	NR	NR	6-15-50	1-2-3
27	NI1300	-	35	deltamethrin*	C22H19Br2NO3	\mathbf{C}	S#	P	15	2
27	NI30/NI(WB)1	64	44	tralomethrin	C22H19Br4NO3	\mathbf{C}	V	S	15	2
29	NI200	-	20	deltamethrin, trans-*	C22H19Br2NO3	-	P#	NR	15	2
29	NI1300	19.9	38	deltamethrin*	C22H19Br2NO3	\mathbf{C}	S#	P	15	2
31	NI200	19.7	38	deltamethrin, trans-*	C22H19Br2NO3	-	P#	NR	15	2
32	NI(V)250	4.5	-	hydramethylnon*	C25H24F6N4	-	-	-	-	-
44	NI(V)250	53	-	hydramethylnon*	C25H24F6N4	-	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.08		-	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
0.08	NI40	0.06	0.04	CGA 171683	C6H5F4N3O2	\mathbf{C}		-	15+50	3
0.08		0.19	0.1	2-methoxy-3,5,6-trichloropyridine	C6H4Cl3NO	\mathbf{C}	P#	\mathbf{C}	6+15	1+2
0.08	FP(WB)0.7	0.07	0.08	dichlorvos	C4H7Cl2O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.09	NI27	0.11	0.11	diuron	C9H10Cl2N2O	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.11		-	0.09	teflubenzuron*	C14H6Cl2F4N2O2	-	NR	NR	6-15-50	1-2-3
0.12	NI0.2	0.18	0.21	etridiazole	C5H5Cl3N2OS	\mathbf{C}	\mathbf{C}	P	6	2
0.13	NI0.25	0.24	0.16	pentachlorobenzene	C6HCl5	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.14		0.16	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
0.14	NI12	0.17	0.1	N-(3,4-dichlorophenyl)-N'-methylure	a C8H8Cl2N2O	-	NR	NR	6-15-50	-
0.14	NI6	0.22	0.1	3,4-dichlorophenylurea	C7H6Cl2N2O	-	NR	NR	6-15-50	-
0.15		0.13	0.1	chlorimuron ethyl ester	C15H15ClN4O6S	P	NR	-	-	-
0.15	NI0.2	0.24	0.22	2,3,5,6-tetrachloroanisole	C7H4Cl4O	-	\mathbf{C}	-	6	1
0.15		0.15	0.14	dimethyl phthalate	C10H10O4	-	P	-	6+15+50	-
0.18		0.19	-	dicamba methyl ester	C8H6Cl2O3	-	-	-	-	-
0.18	NI0.9	0.2	0.2	nitrapyrin	C6H3Cl4N	\mathbf{C}	\mathbf{C}	V	6	2
0.19		0.19	-	chloroneb	C8H8Cl2O2	\mathbf{C}	\mathbf{C}	-	6	2
0.19		-	-	molinate	C9H17NOS	-	-	-	-	-
0.21		0.23	0.18	methyl 2,3,6-trichlorobenzoate	C8H5Cl3O2	-	-	-	-	-
0.22	NI2	0.17	0.13	3-methyl-4-nitrophenol methyl ether	C8H9O3N	-	-	-	-	-
0.22	NI1	0.19	0.14	N, N-diallyl dichloroacetamide	C8H11Cl2NO	\mathbf{C}	S	S	15+50	2+3
0.23		0.14	0.14	teflubenzuron*	C14H6Cl2F4N2O2	-	NR	NR	6-15-50	1-2-3
0.23	FP0.5/NI0.3	0.33	0.24	chlorethoxyfos	C6H11Cl4O3PS	\mathbf{V}	\mathbf{C}	-	6	1
0.23	FS25	0.13	0.11	carboxin sulfoxide	C12H13NO3S	-	NR	NR	6-15-50	1-2-3
0.24		0.15	-	hydroxy chloroneb	C7H6Cl2O2	-	NR	-	6-15	-
0.24		-	-	carbofuran-3-keto-7-phenol	C10H10O3	-	-	-	-	-
0.25	NI100	0.22	0.2	3-carboxy-5-ethoxy-1,2,4-thiadiazole	C3H2N2O3S	NR	-	-	-	-
0.25	FP4	0.07	0.09	methamidophos	C2H8NO2PS	V	-	-	-	-
0.25	NI0.3	0.45	0.33	hexachlorobenzene	C6Cl6	\mathbf{C}	\mathbf{C}	P	6	1

^{*} Multipeak chemical.

[#] Recovery may vary with choice of Florisil elution system; see Tables 303-a, 304-a.

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ies	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.26		0.42	0.33	di-allate	C10H17CINOS	\mathbf{C}	\mathbf{C}	-	6	-
0.26		0.29	0.24	tecnazene	C6HCl4NO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.27	FP(WB)1	0.37	0.29	cadusafos	C10H23O2PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
0.27	NI0.4	0.34	0.19	ethalfluralin	C13H14F3N3O4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
0.27		0.34	0.17	trifluralin	C13H16F3N3O4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
0.27	NI20/NI(WB)25	0.18	0.14	3,5-dichloroaniline	C6H5Cl2N	S	S	S	6+15	1+2
0.27	NI13700	0.21	0.24	TEPP	C8H20O7P2	\mathbf{C}	-	-	-	-
0.28	NI2	0.37	0.18	benfluralin	C13H16F3N3O4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
0.29	NI1000	0.44	0.45	desmedipham	C16H16N2O4	-	-	-	-	-
0.3		0.46	0.34	pentachlorophenyl methyl ether	C7H3Cl5O	\mathbf{C}	\mathbf{C}	C	6	1
0.31		0.33	0.25	ethoprop	C8H19O2PS2	\mathbf{C}	P#	S#	50	1-2-
0.32		0.22	0.21	demeton-O oxygen analog	C8H19O4PS	-	-	-	-	-
0.32	NI30	0.2	0.16	3,4-dichloroaniline	C6H5Cl2N	V	S	-	15	-
0.35	NI0.3	0.49	0.48	1,2,4,5-tetrachloro-3-(methylthio)= benzene	C7H4Cl4S	R	С	-	6	1
0.36		0.36	0.39	triclopyr methyl ester	C8H6Cl3NO3	-	-	-	-	-
0.37	FP0.5	0.3	0.29	phorate oxygen analog	C7H17O3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
0.37	NI9/NI(WB)5	0.34	0.26	propachlor	C11H14CINO	C	NR	NR	6-15-50	1-2-
0.38		0.3	0.25	2,4-D methyl ester	C9H8Cl2O3	-	-	-	-	-
0.38	FP0.5/NI17	0.37	0.32	phorate	C7H17O2PS3	C	V#	V#	6	
0.4	NI0.3	0.56	0.32	chlordene	C10H6Cl6	-	\mathbf{C}	\mathbf{C}	6	1
0.4	FP6/NI4.5	0.51	0.44	diazinon	C12H21N2O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	3
0.42	NP20	0.47	0.53	terbumeton	C10H19N5O	\mathbf{C}	-	-	-	-
0.43		0.32	0.25	chlorpropham	C10H12ClNO2	C	\mathbf{C}	C	15	2
0.44		0.32	0.36	3, 5, 6-trichloro-2-pyridinol methyl ester	C6H4Cl3NO	-	-	-	-	-
0.44		0.45	-	silvex methyl ester	C10H9Cl3O3	-	-	-	-	-
0.44		0.5	0.41	terbufos	C9H21O2PS3	\mathbf{C}	P	S	6	-
0.44	NI1	0.38	0.36	sulfallate	C8H14ClNS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6+15	2
0.46	NI1	0.53	0.3	profluralin	C14H16F3N3O4	V	\mathbf{V}	-	6	-
0.46		0.51	0.46	quintozene	C6Cl5NO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.48		0.4	0.35	BHC, alpha-	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1

\triangleright	
p	l
ЭС	l
Ľ	l
р	l
\succeq	l
一	l
ά	l
ω	
	•

Appendix I:	PESTDATA	Chemicals in	Order by	OV-225 Relative	Retention	Time (cont	inued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.49		0.31	0.32	metasystox thiono*	C6H15O3PS2	-	-	-	-	-
0.49	NI(WB)1.5	0.56	0.47	methyl 3,5-dibromo-4-methoxy= benzoate	C9H8Br2O3	-	-	-	-	-
0.49		0.28	0.32	metasystox thiol	C6H15O3PS2	\mathbf{C}	-	-	-	-
0.49		0.46	0.31	oxydemeton-methyl	C6H15O4PS2	\mathbf{C}	-	-	-	-
0.5	NI(WB)70	0.25	0.16	cymoxanil	C7H10N4O3	V	NR	NR	6-15-50	1-2-
0.51	NI0.5	0.26	0.23	RPA 203328, methylated	C10H9F3O4S	-	-	-	-	-
0.51		0.41	0.4	thiometon	C6H15O2PS3	\mathbf{C}	NR	NR	6-15-50	-
0.52		0.83	0.6	heptachlor	C10H5Cl7	\mathbf{C}	\mathbf{C}	С	6	1
0.53	NI600	0.5	0.24	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
0.53	NI60	0.5	0.47	diazinon oxygen analog	C12H21N2O4P	\mathbf{C}	NR	NR	6-15-50	1-2-
0.53		0.39	0.38	fonofos oxygen analog	C10H15O2PS	V	NR	NR	6-15-50	1-2-
0.56		0.52	0.44	fonofos	C10H15OPS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2+3
0.56		0.41	0.41	demeton-S	C8H19O3PS2	\mathbf{C}	NR	-	6-15-50	-
0.58		1.05	0.76	aldrin	C12H8Cl6	\mathbf{C}	\mathbf{C}	С	6	1
0.59	NI150	0.45	0.46	clomazone	C12H14ClNO2	\mathbf{C}		-	50	3
0.59	NI30	0.58	0.51	etrimfos	C10H17N2O4PS	\mathbf{C}	\mathbf{C}	С	15	2+3
0.59		0.5	0.45	pentachlorobenzonitrile	C7Cl5N	\mathbf{C}	\mathbf{C}	P	15	2
0.6	NI1.6	0.46	0.39	furilazole	C11H13Cl2NO3	\mathbf{C}	S	-	50	3
0.6	NP10	0.35	0.38	2,3,5-trimethacarb	C11H15NO2	\mathbf{C}	S#	NR	50	1-2-
0.6		0.54	0.46	disulfoton	C8H19O2PS3	\mathbf{C}	P#	NR	6	1-2-
0.61		0.65	0.56	diisobutyl phthalate	C16H2204	-	P	-	15+50	-
0.62		-	-	2,4-D isopropyl ester*	C11H12Cl2O3	-	-	-	-	-
0.62		0.62	0.49	2,4-D isobutyl ester	C12H14Cl2O3	-	-	-	-	-
0.63		0.49	0.47	2,4,5-T methyl ester	C9H7Cl3O3	-	-	-	-	-
0.63	NI250	0.38	0.26	3-methyl-4-nitrophenol	C7H7O3N	V	NR	NR	6-15-50	1-2-
0.63	NI0.4	0.56	0.56	2,3,5,6-tetrachloronitroanisole	C7H3Cl4NO3	-	\mathbf{C}	-	6	1+2
0.64		0.82	0.67	chlordene, alpha-	C10H6Cl6	-	-	-	-	-
0.64	FP5	0.15	0.19	acephate	C4H10NO3PS	\mathbf{C}	-	-	-	-
0.64		0.67	0.56	dichlofenthion	C10H13Cl2O3PS	\mathbf{C}	\mathbf{C}	V	6	2
0.65		1.34	1.43	merphos*	C12H27PS3	-	C	С	6+15+50	3
0.65		0.84	-	chlordene epoxide	C10H6Cl6O	_	С	_	15	

APPENDIX I

RRT/c	Detector Responses	RRT/c	RRT/c	•	Molecular			Recover	ies	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.65	NI37	0.53	0.41	propazine	C9H16ClN5	\mathbf{C}	S	NR	15+50	3
0.65		0.67	-	2,4,5-T isopropyl ester	C11H11Cl3O3	-	-	-	-	-
0.66		0.68	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
0.69	NI1.6	0.5	0.48	4-(dichloroacetyl)-l-oxa-4-azapiro= [4.5]decane	C10H15Cl2NO2	С	P	-	50	3
0.69	NI0.5	0.94	0.87	pentachlorophenyl methyl sulfide	C7H3Cl5S	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.69		0.48	0.47	lindane	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.7	NI2550	0.35	0.41	methabenzthiazuron	C10H11N3OS	\mathbf{C}	NR	NR	6-15-50	1-2-
0.71	NI43	0.47	0.48	terbuthylazine	C9H16N5Cl	\mathbf{C}	P	-	15+50	-
0.72		0.62	-	2,4-DB methyl ester	C11H12Cl2O3	-	-	-	-	-
0.73	NI0.5	0.59	0.66	2,3,5,6-tetrachloroanisidine	C7H5Cl4NO	-	\mathbf{C}	-	6	2
0.74		0.69	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
0.74		0.42	0.33	2,4-D isopropyl ester*	C11H12Cl2O3	-	-	-	-	-
0.74		0.43	0.44	atrazine	C8H14ClN5	\mathbf{C}	S#	NR	50	1-2-
0.75		0.42	0.45	chlorbufam	C11H10ClNO2	\mathbf{C}		-	15	2+
0.76		0.53	0.37	fluchloralin	C12H13ClF3N3O4	\mathbf{C}	\mathbf{C}	-	6	2
0.78	NP200	0.45	0.5	3,4,5-trimethacarb	C11H15NO2	\mathbf{C}	NR	NR	50	1-2-
0.79	NI160	0.5	0.44	metribuzin, deaminated diketo metabolite*	C7H11N3O2	NR	NR	NR	6-15-50	1-2-
0.79	NI0.5	0.67	0.66	pentachloroaniline	C6H2Cl5N	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.8		0.51	0.63	etrimfos oxygen analog	C10H17N2O5P	\mathbf{C}	-	-	-	-
0.8	NI20	0.55	0.63	isazofos	C9H17CIN3O3PS	\mathbf{C}	С#	-	50	2+
0.8	NI2	0.75	0.68	CGA 14128	C12H21N2O4PS	\mathbf{C}		-	50	1-2-
0.8	NI80	0.3	0.53	desethyl simazine	C5H8ClN5	-	NR	NR	50	1-2-
0.83	NI130	0.41	0.5	simazine	C7H12CIN5	\mathbf{C}	NR	NR	50	1-2-
0.84		0.98	0.89	chlordene, beta-	C10H6Cl6	-	-	-	-	-
0.84	NI3	0.51	0.4	pronamide	C12H11Cl2NO	\mathbf{C}	P	-	15+50	-
0.85	NI1	0.81	0.75	tridiphane	C10H7Cl5O	C	С	-	6	1+5
0.85		0.81	-	chloroxuron	C15H15ClN2O2	\mathbf{C}	NR	NR	6-15-50	1-2-
0.86		0.72	0.79	chlorpyrifos-methyl	C7H7Cl3NO3PS	\mathbf{C}	\mathbf{C}	-	6	2
0.86	NI20	0.2	0.61	desdiethyl simazine	C3H4ClN5	-	NR	NR	6-15-50	1-2-
0.86		0.55	1.04	tetraiodoethylene	C2I4	-	P	P	6	-

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.86	NI2	0.81	0.76	ronnel	C8H8Cl3O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
0.88	NI5	0.75	0.67	acetochlor	C14H20NO2Cl	\mathbf{C}	С#	P	50	3
0.89	NI1	0.98	0.88	chlordene, gamma-	C10H6Cl6	-	-	-	-	-
0.91		1.08	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
0.91	NI180	0.48	0.48	monolinuron	C9H11ClN2O2	\mathbf{C}	-	-	-	-
0.92	NI(WB)13	0.25	0.28	oxamyl oxime metabolite	C5H10N2O2S	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.92		0.55	-	dichlone	C10H4Cl2O2	P	S#	S #	6-15-50	2+3
0.92		0.88	0.84	dibutyl phthalate	C16H22O4	-	C	\mathbf{C}	15+50	-
0.93	NI600	2	0.44	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
0.93	NI1	0.52	0.44	dinitramine	C11H13F3N4O4	\mathbf{C}	-	P	15	-
0.94		1.33	1.05	octachlor epoxide	C10H4Cl8O	\mathbf{C}	C	\mathbf{C}	6	1
0.95		1.53	-	Perthane olefin	C18H19Cl	-	C	\mathbf{C}	6	1
0.96		0.31	0.43	dicrotophos	C8H16NO5P	\mathbf{C}	NR	-	6-15-50	-
0.96		0.42	0.45	dicloran	C6H4Cl2N2O2	\mathbf{C}	S	P	15+50	2+3
0.97	NI(WB)6	0.42	0.49	PPG-947, methylated*	C18H13ClF3NO7	-	-	-	-	-
0.97	NP50	0.94	0.66	prodiamine	C13H17F3N4O4	\mathbf{C}	-	-	-	-
0.98		0.72	-	dimethenamid	C12H18ClNO2S	-	NR	NR	6-15-50	1-2-3
1	NI150	1.05	-	PP 890	C9H10O2ClF3	-	-	-	-	-
1		0.94	0.98	thiobencarb	C12H16ClNOS	\mathbf{C}		V	15	2+3
1	NI6	0.8	0.72	alachlor	C14H2OClNO2	\mathbf{C}	С	C#	50	3
1		1	1	chlorpyrifos	C9H11Cl3NO3PS	\mathbf{C}	\mathbf{C}	P	6	2
1.02		0.64	0.62	ronnel oxygen analog	C8H8Cl3O4P	\mathbf{C}	NR	-	6-15-50	-
1.03		1.14	1.14	pirimiphos-ethyl	C13H24N3O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15+50	3
1.03		0.44	-	chloramben methyl ester	C8H7Cl2NO2	-	-	-	-	-
1.06	NI2	0.64	0.7	benoxacor	C11H11Cl2NO2	\mathbf{C}	P	\mathbf{C}	15+50	2+3
1.07		0.82	0.92	dichlorobenzophenone, o,p'-	C13H8Cl2O	-	\mathbf{C}	\mathbf{C}	15	2
1.08		4.1	0.91	dicofol, o,p'-*	C14H9Cl5O	\mathbf{C}	V	S	6+15	2
1.08		0.84	-	terbutryn	C10H19N5S	\mathbf{C}	-	-	-	-
1.1		0.77	-	ametryn	C9H17N5S	\mathbf{C}	-	-	-	-
1.11	NI20	0.71	0.71	dimethachlor	C13H18ClNO2	\mathbf{C}	-	-	-	-
1.11	FP5	0.25	0.39	omethoate	C5H12NO4PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.13	NI1	1.06	1	DCPA	C10H6Cl4O4	С	\mathbf{C}	\mathbf{C}	15	2

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular	Recoveries					
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C	
1.15		0.69	0.64	vinclozolin	C12H9Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2	
1.15		1.19	1.2	TDE, o,p'-, olefin	C14H9Cl3	-	-	-	-	-	
1.16	NI(WB)55	0.39	0.54	4-chlorobenzylmethyl sulfoxide	C8H9ClOS	-	NR	NR	6-15-50	1-2	
1.18		1.66	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-	
1.19		2.85	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-	
1.2	NI(WB)8	0.74	0.66	vinclozolin metabolite B	C12H11Cl2NO4	\mathbf{C}	P#	\mathbf{C}	6+15	2	
1.21	NI9	1.03	0.93	metolachlor	C15H22ClNO2	\mathbf{C}	S#	NR	50	1-2	
1.21		2.02	-	simetryn	C8H15N5S	\mathbf{C}	-	-	-	-	
1.22	NI8	1.15	0.93	butralin	C14H21N3O4	V	\mathbf{C}	-	6+15+50) .	
1.22	NI2	1.37	1.12	S-bioallethrin	C19H26O3	-	С	-	50		
1.22		0.64	0.74	cyprazine	C9H14ClN5	\mathbf{C}	-	-	-		
1.22		1.29	1.15	heptachlor epoxide	C10H5Cl7O	\mathbf{C}	\mathbf{C}	\mathbf{C}	6		
1.22		1.36	-	allethrin	C19H26O3	-	\mathbf{C}	C#	50		
1.24	NI2	1.14	1.01	isopropalin	C15H23N3O4	\mathbf{C}	С	-	6		
1.25		0.99	1.08	dichlorobenzophenone, p,p'-	C13H8Cl2O	-	\mathbf{C}	\mathbf{C}	15		
1.28		4.4	1.08	dicofol, p,p'-*	C14H9Cl5O	\mathbf{C}	V	P#	6+15	1	
1.28		1.55	1.51	DDE, o,p'-	C14H8Cl4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6		
1.29	NI160	0.73	0.52	metribuzin, deaminated diketo metabolite*	C7H11N3O2	NR	NR	NR	6-15-50	1-	
1.29	NI6	1.11	1.16	bromophos	C8H8BrCl2O3PS	\mathbf{C}	С	\mathbf{C}	6		
1.3		0.39	0.52	2,6-dichlorobenzamide	C7H5NOCl2	\mathbf{C}	NR	NR	6-15-50	1-	
1.34	NI(WB)51	0.43	0.6	6-chloro-2,3-dihydro-3,3,7-methyl-5H-oxazolo(3,2-a)pyrimidin-5-one	C9H13ClN2O2	-	NR	NR	6-15-50	1-3	
1.36	NI3	1.45	1.45	TDE, p,p'-, olefin	C14H9Cl3	\mathbf{C}	\mathbf{C}	\mathbf{C}	6		
1.38		1.64	1.47	endosulfan I	C9H6Cl6O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15		
1.4		0.6	0.78	ethiofencarb	C10H15NO2S	\mathbf{C}	NR	NR	6-15-50		
1.41	NI200	3.38	4.9	desmethyl norflurazon	C11H7ClF3N3O	\mathbf{V}	NR	NR	6-15-50	1-	
1.41	NI15	0.56	0.55	metribuzin, diketo metabolite	C7H12N4O2	NR	NR	NR	6-15-50	1-	
1.41	NI(WB)80	0.55	0.9	3-ketocarbofuran	C12H12NO4	S	NR	NR	6		
1.42		-	-	2,4-D propylene glycol butyl ether ester*	C15H2OCl2O4	-	-	-	-		
1.42		1.51	1.45	bromophos-ethyl	C10H12BrCl2O3PS	С	\mathbf{C}	P	6		

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c Detector Responses RRT/c RRT/c Molecular _____

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular		Recoveries			
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
1.44		0.67	0.69	metobromuron	C9H11BrN2O2	\mathbf{C}	NR	NR	6-15-50	1-2-3
1.44		0.55	0.74	chlorothalonil	C8Cl4N2	S	C#	С#	6-15-50	2+3
1.45	NI1.5	0.96	0.86	nitrofluorfen	C13H7ClF3NO3	C	\mathbf{C}	С	15	2
1.45		1.75	1.42	nonachlor, trans-	C10H5Cl9	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.46		0.97	-	methazole	C9H6Cl2N2O3	-	-	-	-	-
1.46		1.49	1.34	chlordane, trans-	C10H6Cl8	\mathbf{C}	\mathbf{C}	C	6	1
1.46		0.96	1.18	fenthion	C10H15O3PS2	C	S#	NR	6+15	1-2-
1.47	NI(WB)300	1.05	0.88	acifluorfen	C14H7ClF3NO3	-	NR	NR	6-15-50	1-2-
1.47		0.54	0.62	fenfuram	C12H11NO2	С	-	-	-	-
1.47	NI0.7	0.57	0.91	metribuzin	C8H14N4OS	V	NR	NR	50	1-2-
1.48	NI100	6.1	4.5	tralkoxydim*	C20H27NO3	V	NR	NR	50	1-2-
1.48	NI3	1.22	1.21	pendimethalin	C13H19N3O4	С	\mathbf{C}	P	15	2
1.49	NI44	0.91	1.05	malathion	C10H19O6PS2	С	\mathbf{C}	\mathbf{C}	15+50	3
1.51		-	-	2,4-D ethyl hexyl ester*	C16H22Cl2O3	-	-	-	-	-
1.51		0.95	1.08	chlorpyrifos oxygen analog	C9H11Cl3NO4P	\mathbf{C}	NR	-	6-15-50	-
1.54		1.66	1.48	chlordane, cis-	C10H6Cl8	\mathbf{C}	\mathbf{C}	C	6	1
1.55		0.75	0.79	prothoate	C9H20NO3PS2	\mathbf{C}	-	-	-	-
1.55		0.68	0.87	malathion oxygen analog	C10H19O7PS	C	NR	NR	6-15-50	1-2-
1.58	NI5	1.21	1.29	chlorfenvinphos, alpha-	C12H14Cl3O4P	\mathbf{C}	-	NR	6-15-50	-
1.59		1.92	1.86	DDE, p,p'-	C14H8Cl4	\mathbf{C}	\mathbf{C}	C	6	1
1.6	FP3	0.31	0.5	monocrotophos	C7H14NO5P	С	NR	NR	6-15-50	1-2-
1.6		0.4	0.62	dimethoate	C5H12NO3PS2	C	NR	NR	6-15-50	1-2-
1.61		2.04	2.69	cyproconazole	C15H18ClN3O	C	NR	NR	6-15-50	1-2-
1.62	NII	0.77	0.99	Tycor	C9H16N4OS	C	S	S	50	3
1.62		0.43	0.56	BHC, beta-	C6H6Cl6	\mathbf{C}	\mathbf{C}	C	6	1
1.62		1.39	1.54	chlorbenside	C13H10Cl2S	\mathbf{C}	S	P	6	1
1.63	NI1	0.99	1.07	1-hydroxychlordene	C10H6Cl6O	-	R	-	15	-
1.64		1.95	1.88	merphos*	C12H27PS3	-	\mathbf{C}	С	6+15+50	3
1.64	NI3/NP20	1.05	1	triadimefon	C14H16ClN3O2	\mathbf{C}	S#	S#	50	1-2-
1.64	FP1/NI11	0.71	0.87	parathion-methyl	C8H10NO5PS	\mathbf{C}	\mathbf{C}	C	15	2
1.64	NI30	0.6	0.7	ethoxyquin	C14H19N0	\mathbf{C}	NR	NR	6-15-50	-
1.65		1.95	1.88	tribufos	C12H27OPS3	\mathbf{C}	\mathbf{C}	P	15+50	3

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ies	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C
1.67		-	1.44	2,4-D butoxyethyl ester*	C14H18Cl2O4	-	-	-	-	-
1.67	NI6	2.75	2.38	chlordecone	C10H8Cl10O5	-	S#	P#	15+50	1-2-
1.71		0.9	1.01	dichlofluanid	C9H11Cl2FN2O2S2	\mathbf{C}	С#	-	15+50	2+
1.71		0.55	0.66	parathion-methyl oxygen analog	C8H10NO6P	-	NR	NR	6-15-50	1-2-
1.71		0.5	0.67	BHC, delta-	C6H6Cl6	\mathbf{C}	C	\mathbf{C}	6+15	1
1.73		1.36	1.38	isofenphos	C15H24NO4PS	\mathbf{C}	С	-	15+50	-
1.74	NI1	1.85	1.82	prothiofos	C11H15Cl2PO2S2	\mathbf{C}	C	\mathbf{C}	6	2
1.74	FP5	1.17	1.24	isofenphos oxygen analog	C15H24NO5P	\mathbf{C}	-	-	-	-
1.76		2.12	1.76	pyrethrins*	C21H27O4	-	С	\mathbf{C}	50	-
1.78		2.04	1.78	2,4-D isooctyl ester*	C16H22Cl2O3	-	-	-	-	-
1.78		2.1	1.68	2,4-D ethyl hexyl ester*	C16H22Cl2O3	-	-	-	-	-
1.79		2	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
1.82		0.84	1.05	fenitrothion	C9H12NO5PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
1.83	NI14	1.73	1.46	butachlor	C17H26ClNO2	\mathbf{C}	C	-	50	-
1.84	NI6	1.57	1.64	cyclanilide methyl ester	C12H11Cl2NO3	-	-	-	-	-
1.87		1.91	1.84	dieldrin	C12H8Cl6O	\mathbf{C}	C	\mathbf{C}	15	2
1.88		1.24	1.47	anilazine	C9H5Cl3N4	V	S	P	15+50	2+
1.89	NI1000	1.39	1.54	CGA 189138	C13H8O3Cl2	-	-	-	-	-
1.91	NI3/NP65	0.99	0.96	KWG 1323	C14H16ClN3O3	\mathbf{C}	NR	NR	6-15-50	1-2
1.91	NI(WB)2	0.41	0.66	4-chlorobenzylmethyl sulfone	C8H9ClO2S	-	NR	NR	6-15-50	1-2
1.91	FP2/NI6	0.98	1.07	parathion	C10H14NO5PS	\mathbf{C}	С	\mathbf{C}	15	2
1.93	FS56/NI638	0.86	1.02	ethofumesate	C13H18O5S	\mathbf{C}	-	-	-	-
2	FP4/NI5	1.29	1.52	chlorfenvinphos, beta-	C12H14Cl3O4P	\mathbf{C}	S#	-	50	1-2
2		1.32	1.64	quinalphos	C12H15N2O3PS	\mathbf{C}	С	-	15	-
2.01	NI(WB)2	0.69	0.79	vinclozolin metabolite S	C10H7Cl2NO3	V	P	V#	15	2
2.01		2.23	2.42	Perthane	C18H2OCl2	\mathbf{C}	С	\mathbf{C}	6]
2.02		0.5	0.5	tris(chloropropyl) phosphate	C9H18Cl3O4P	C	NR	NR	6-15-50	1-2
2.03	NI1.5	-	-	fenson	C12H10O3ClS	-	-	-	-	-
2.05		1.31	1.83	phenthoate	C12H17O4PS2	\mathbf{C}	\mathbf{C}	-	15+50	-
2.08		1.82	1.79	2,4-D butoxyethyl ester*	C14H18Cl2O4	-	-	-	-	-
2.09		3.22	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	
2.1	NI(WB)3.8	0.8	-	bromacil methyl ether	C10H16BrN2O2	_	_	_	_	

I	Append	dix I: PESTDATA	Chemicals in Order	by OV-225 Relative Retention Time (continued)
l	RRT/c	Detector Responses	RRT/c RRT/c	Molecular

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
2.1	NI(WB)7	0.54	0.72	terbacil	C9H13ClN2O2	\mathbf{C}	NR	NR	6-15	2+3
2.13		0.85	0.95	linuron	C9H10Cl2N2O2	V	V#	V	50	3
2.22		2.13	2.29	endrin	C12H8Cl6O	\mathbf{C}	С#	С#	15	2
2.23		1.44	1.19	triflumizole	C15H15ClF3N3O	\mathbf{C}	-	-	-	-
2.25	NI30	0.45	0.71	methidathion sulfoxide	C5H8N2O4S2	-	NR	NR	6-15-50	1-2-3
2.27	NI(WB)630	1.35	2.55	3-tert-butyl-5-chloro-6-hydroxy= methyluracil	C9H13CIN2O3	-	NR	NR	6-15-50	1-2-3
2.27		2.55	2.7	DDT, o,p'-	C14H9Cl5	\mathbf{C}	С	С	6	1
2.29	NI400	0.56	0.82	methidathion sulfone	C5H8N2O3S2	-	NR	NR	6-15-50	1-2-3
2.33	NI3	2.64	2.8	tetrasul	C12H6Cl4S	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
2.33		1.08	1.3	crufomate	C12H19ClNO3P	\mathbf{C}	NR	NR	6-15-50	-
2.33	NI6250	0.5	0.66	ethylenethiourea	C3H6N2S	S	NR	NR	6-15-50	1-2-
2.34		1.8	2.13	profenofos	C11H15BrClO3PS	\mathbf{C}	P	P	50	3
2.36	NI3000	2.3	2.31	fluazifop butyl ester	C19H20F3NO4	\mathbf{C}	\mathbf{C}	V	15	3
2.46		1.58	2.1	triazamate	C13H22N4O3S	\mathbf{C}	NR	NR	6-15-50	1-2-
2.46		1.9	2.19	TDE, o,p'-	C14H10Cl4	-	C	C	6	1
2.48		1.97	1.96	oxadiazon	C15H18Cl2N2O3	\mathbf{C}	\mathbf{C}	P	15	-
2.49	NI20	0.44	0.64	prosulfuron*	C15H16F3N5O4S	-	NR	NR	6-15-50	1-2-
2.55		0.89	1.26	phorate sulfoxide	C7H17O3PS3	\mathbf{C}	NR	NR	6-15-50	1-2-
2.65	NI300	0.6	0.9	CGA 120844	C8H9NSO3	-	NR	NR	6-15-50	1-2-
2.66		-	-	2,4,5-T butoxyethyl ester*	C14H17Cl3O4	-	-	-	-	-
2.66		2.53	-	Compound K*	C10H6Cl8	-	C	-	-	1
2.67		0.75	-	picloram methyl ester	C7H5Cl3N2O2	-	-	-	-	-
2.67	HN4	1.28	1.58	mecarbam	C10H20NO5PS2	\mathbf{C}		-	50	-
2.69		-	-	2,4,5-T isooctyl ester*	C16H21Cl3O3	-	-	-	-	-
2.71	FS2	0.41	0.81	dimethipin	C6H10O4S2	\mathbf{C}	NR	NR	6-15-50	1-2-
2.72		1.58	1.97	Gardona	C10H9Cl4O4P	\mathbf{C}	NR	NR	6-15-50	1-2-
2.73		1.21	1.5	des N-isopropyl isofenphos	C12H18NO4PS	\mathbf{C}	S	-	50	-
2.74		3.03	2.88	ethephon	C2H6ClO3P	NR		-	6+15+50	1+2+
2.77		2	-	aramite*	C15H23ClO4S	\mathbf{C}	P	NR	15	-
2.78		3.3	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
2.82	NI8	0.66	0.78	propanil	C9H9Cl2NO	С	NR	NR	6-15	3

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ies	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
2.84		2.95	2.7	pyrethrins*	C21H27O4	-	\mathbf{C}	\mathbf{C}	50	-
2.85	NI(WB)780	0.35	0.4	ethametsulfuron methyl ester*	C15H18N6O6S	-	NR	NR	6-15-50	1-2-
2.85		1.37	1.9	crotoxyphos	C14H19O6P	\mathbf{C}	NR	NR	6-15-50	1-2-
2.89	FS63/NI10	0.68	0.93	2,3-dihydro-3,3-methyl-2-oxo-5- benzofuranyl methyl sulfonate	C11H12O5S	-	-	-	-	-
2.9	FP5/NI1500	0.92	1.28	terbufos oxygen analog sulfone	C9H21O5PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
2.9		2.33	2.41	chloropropylate	C17H16Cl2O3	P	C	\mathbf{C}	15+50	3
2.91		1.86	1.79	hexaconazole	C14H17Cl2N3O	\mathbf{C}	-	-	-	-
2.95		0.71	0.96	demeton-O sulfone*	C8H19O5PS2	\mathbf{C}	-	-	-	-
2.95		5.8	5.6	mirex	C10Cl12	P	\mathbf{C}	P	6	1
3	FP15/NI300	1.08	1.66	fosthiazate	C9H18NO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
3.01		1.23	1.94	folpet	C9H4Cl3O2NS	\mathbf{C}	\mathbf{C}	P	15+50	2+3
3.02	NI(WB)9	0.89	0.93	vinclozolin metabolite E	C11H11Cl2NO2	\mathbf{C}	S	NR	15+50	-
3.02	NI(WB)10	2	3.38	kresoxim-methyl	C18H19NO4	P	\mathbf{C}	\mathbf{C}	15+50	3
3.04	NI7	1.37	1.49	procymidone	C13H11Cl2NO2	\mathbf{C}	C	P	15	-
3.04	NI3	1.61	2.2	ovex	C12H8Cl2O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
3.05		2.14	-	aramite*	C15H23ClO4S	\mathbf{C}	P	NR	15	-
3.1		2.56	-	2,4,5-T isooctyl ester*	C16H21Cl3O3	-	-	-	-	-
3.14	NI14	1.78	2	diethatyl-ethyl	C16H22ClNO3	\mathbf{C}	NR	NR	6-15-50	1-2-
3.16	NI(WB)120	1.9	1.86	PPG-2597	C20H17ClF3NO6	-	NR	NR	6-15-50	1-2-
3.24	NI5	2.38	3.14	leptophos photoproduct	C13H11Cl2O2PS	\mathbf{C}	-	-	-	-
3.26		0.97	1.3	phorate sulfone	C7H17O4PS3	\mathbf{C}	S#	S #	6-15-50	3
3.26		2.31	2.61	chlorobenzilate	C16H14Cl2O3	\mathbf{C}	С#	P#	15+50	3
3.28		5.3	-	2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
3.3		2.91	-	2,4,5-T butoxyethyl ester*	C14H17Cl3O4	-	-	-	-	-
3.33	NI3	2.52	2.61	nonachlor, cis-	C10H5Cl9	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
3.33	NI50	1.4	2.28	methidathion	C6H11N2O4PS3	\mathbf{C}	S	P #	50	3
3.39		1.27	1.42	chlorbromuron	C9H10BrClN2O2	V	V	V	50	3
3.4		2.96	-	2,4,5-T isooctyl ester*	C16H21Cl3O3	-	-	-	-	-
3.4	NI7	2.02	2.03	diclobutrazol	C15H19Cl2N3O	\mathbf{C}	NR	NR	6-15-50	1-2-
3.49		1.2	1.85	captan	C9H8Cl3NO2S	\mathbf{C}	P	\mathbf{C}	50	3
3.5		1.79	2.76	imazamethabenz methyl ester*	C16H20N2O3	С	-	-	-	_

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular		Recoveries			
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ Cl
3.5		1.26	1.92	Sulphenone	C12H9ClO2S	\mathbf{C}		-	50	3
3.6	NI(WB)780	0.55	0.95	ethametsulfuron methyl ester*	C15H18N6O6S	-	NR	NR	6-15-50	1-2-
3.6		1.54	-	2,4-D propylene glycol butyl ether ester*	C15H2OCl2O4	-	-	-	-	-
3.6		3.13	3.5	DDT, p,p'-	C14H9Cl5	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
3.7		2	2.6	bupirimate	C13H24N4SO3	\mathbf{C}	-	-	-	-
3.7	NP6	1.66	2.41	fenamiphos	C13H22NO3PS	\mathbf{C}	NR	NR	6-15-50	1-2-
3.7	NI9	2.97	4.2	methoxychlor olefin	C16H14Cl2O2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
3.7		1.42	-	fenac	C8H5Cl3O2	-	NR	NR	6-15-50	-
3.77	NI60	0.83	1.06	metribuzin, deaminated metabolite	C8H13N3OS	\mathbf{C}	NR	NR	6-15-50	1-2-
3.8		3.25	-	2,4,5-T isooctyl ester*	C16H21Cl3O3	-	-	-	-	-
3.8		4.9	4.5	bifenthrin	C23H22ClF3O2	V	\mathbf{C}	-	6+15	2
3.8	NI3	2.03	2.71	nitrofen	C12H7Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
3.8		2.41	2.87	TDE, p,p'-	C14H10Cl4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
3.9		2.21	2.77	endosulfan II	C9H6Cl6O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15+50	2
3.93	FP2/NI8	2.56	3.36	ethion	C9H22O4P2S4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
4	NI(WB)13	2.51	4.2	pyrithiobac-sodium methyl ester	C14H13ClN2O4	-	-	-	-	-
4		2	2.16	oxyfluorfen	C15H11ClF3NO4	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
4		1.76	2.08	imazalil	C14H14Cl2N2O	\mathbf{C}	NR	NR	6-15-50	-
4.1	FP6	2.22	2.99	chlorthiophos oxygen analog	C11H15Cl2O4PS	\mathbf{C}	NR	NR	6-15-50	1-2-
4.1		1.6	3.17	isoprothiolane	C12H18O4S2	\mathbf{C}	-	-	-	-
4.1		1.88	-	ethion oxygen analog	C9H22O5P2S3	\mathbf{C}	-	-	-	-
4.2		2.17	3.06	carbophenothion oxygen analog	C11H16ClO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
4.2		2.94	3.7	carbophenothion	C11H16ClO2PS3	\mathbf{C}	\mathbf{C}	P	6	2
4.2		2.19	2.38	binapacryl	C15H18N2O6	\mathbf{C}	P	P	15	-
4.3	NI160	2.4	3	imazethapyr ammonium salt methyl ester	C16H21N3O3	-	-	-	-	-
4.3		1.15	1.54	CGA 91305	C10H8Cl2N3O	V	NR	NR	6-15-50	1-2-
4.3	NI12	1.5	2.67	TCMTB	C9H6N2S3	\mathbf{C}	P	P	15	-
4.5		32	-	hydramethylnon*	C25H24F6N4	-	-	-	-	-
4.5	NI23	3.3	5	methoxychlor, o, p'-	C16H15Cl3O2	-	\mathbf{C}	-	6	-
4.5		6.4	6.1	bis(2-ethylhexyl) phthalate	C24H38O4	_	С	\mathbf{C}	15+50	_

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ies	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C
4.7	NI60	1.13	1.38	RPA202248	C15H12SNO4F3	NR	NR	NR	6-15-50	1-2-
4.7	NI40	1.11	1.33	isoxaflutole (prop)	C15H12SNO4F3	NR	V#	S #	50	3
4.7		2.85	-	chlornitrofen	C12H6Cl3NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	6+15	2
4.8		5.4	6.5	phenothrin*	C23H26O3	-	-	-	-	-
4.8		-	-	Dilan*	C15.5H14Cl2NO2	-	P	P	15	-
4.8	NI1300	3.8	4.3	propargite	C19H26O4S	\mathbf{C}	\mathbf{C}	-	15	2
4.8	NI(WB)12	0.8	1.36	bromacil	C9H13BrN2O2	\mathbf{C}	NR	NR	6-15-50	1-2
4.9	NI12	3.57	4.7	diclofop-methyl	C16H14Cl2O4	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
4.9		0.89	1.48	cyanazine	C9H13ClN6	\mathbf{C}	NR	-	6-15-50	
5	NI(WB)6	2.14	2.4	PPG-947, methylated*	C18H13CIF3NO7	-	-	-	-	
5	NI(WB)4	2.15	2.4	PPG-847, methylated	C15H9ClF3NO3	-	-	-	-	
5.1		4.1	-	2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	
5.1		3.06	4.5	butyl benzyl phthalate	C19H20O4	-	\mathbf{C}	P	15+50	
5.3		-	-	Dilan*	C15.5H14Cl2NO2	-	P	P	15	
5.5		5.5	9.1	phosalone	C12H15CINO4PS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	50	2
5.6		3.21	4	propiconazole*	C15H17Cl2N3O2	\mathbf{C}	NR	NR	6-15-50	1-
5.8		2.33	-	Dilan*	C15.5H14Cl2NO2	-	P	P	15	
5.8	FP60	1.15	1.75	demeton-S sulfone	C8H19O5PS2	\mathbf{C}	-	-	-	
5.8	NI(WB)5	3.26	4.67	clodinafop-propargyl	C17H13ClFNO4	\mathbf{V}	V	-	50	
6.3		2.87	5.3	edifenphos	C14H15O2PS2	\mathbf{C}	-	-	-	
6.5	NI5	1.53	2.41	CGA 94689A	C15H21NO5	\mathbf{V}	NR	NR	6-15-50	1-5
6.5		4.4	-	bromopropylate	C17H16Br2O3	\mathbf{C}	С#	C#	15+50	1-5
6.6	FS175/NI400	1	1.46	2-hydroxy-2,3-dihydro-3,3-methyl-5- benzofuranyl methyl sulfonate	C11H14O5S	-	-	-	-	
6.6	NI8	1.54	2.45	CGA 94689B	C15H21NO5	S	NR	NR	6-15-50	1-5
6.6	NI(WB)5	4.8	6.3	cloquintocet-mexyl	C18H22CINO3	\mathbf{V}	NR	-	6-15-50	1-5
6.7		1.5	2.39	disulfoton sulfone	C8H19O4PS3	\mathbf{C}	NR	-	6-15-50	
6.9		4.3	4.4	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	:
7	NI10	4.8	5.7	fenpropathrin	C22H23NO3	-	V#	V	15	:
7.2		1.9	2.6	myclobutanil	C15H17CIN4	\mathbf{C}	NR	NR	6-15-50	1-5
7.2		4.7	7.2	methoxychlor, p, p'-	C16H15Cl3O2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	:
7.3		3.36	4.8	nuarimol	C17H12ClFN2O	С	NR	С#	50	1-9

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c			Molecular			Recover	ries	
OV-225	with OV-225 Column	OV-101	OV-17		Name	Formula	302	303	304	Ethers	CH ₂ C
7.5		2.81	-		Dilan*	C15.5H14Cl2NO2	-	P	P	15	-
7.5	NI10	2.81	3.9		Prolan	C15H13Cl2NO2	P	S	S	15	2
7.5	NI6	3.06	4.4		Bulan	C16H15Cl2NO2	\mathbf{C}	P	P	15	2
7.6		4.2	6.5		leptophos oxygen analog	C13H10BrCl2O3P	\mathbf{C}	-	-	-	-
7.7		7	-		2,4,5-T BEP ester*	C17H23Cl3O3	-	-	-	-	-
7.7		4.8	4.8		dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
7.7		5.8	8.5	1	leptophos	C13H10BrCl2O2PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
7.9		1.5	-		procyazine	C10H13ClN6	\mathbf{C}	-	-	-	-
8	NI6	1.25	1.09		MB45950	C12H4SN4F6Cl2	S	P	V	15+50	2+
8.2		3.39	-		Dilan*	C15.5H14Cl2NO2	-	P	P	15	-
8.2		3.1	4.6		cyanofenphos	C15H14NO2PS	\mathbf{C}	-	-	-	-
8.3		2.83	4		endosulfan sulfate	C9H6Cl6O4S	\mathbf{C}	\mathbf{C}	\mathbf{C}	50	9
8.4	NI6	4.3	6		benzoylprop-ethyl	C18H17Cl2NO3	P	NR	NR	6-15-50	1-2
8.5		4.5	7.2		tetramethrin*	C19H25NO4	\mathbf{C}	NR	NR	6-15-50	1-9
8.6	NI7	4.7	7.2		tetrasul sulfoxide	C12H6Cl4OS	-	-	-	-	
8.7	NI10	1.35	1.16		fipronil	C12H4Cl2F6N4OS	S	S	\mathbf{V}	50	:
8.9	NI500	12	6.1		CGA 205374	C16H11N3O2Cl2	-	NR	NR	6-15-50	1-2
8.9		1.3	-		chlorsulfuron	C12H12CIN5O4S	-	NR	NR	6-15-50	
9.5		5.1	5.6		dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	9
9.7		4.8	6.8		piperophos	C14H28NO3PS2	\mathbf{C}	-	-	-	
0.3	FP15	4.7	6.9		chlorthiophos sulfoxide	C11H15Cl2O4PS2	\mathbf{C}	NR	NR	6-15-50	1-2
0.3		3.6	-		endrin ketone	C12H8Cl6O	-	C	\mathbf{C}	50	9
0.6		4.5	6.9		EPN	C14H14NO4PS	\mathbf{C}	C	\mathbf{C}	15	9
0.8	NI20	7.9	12.6		HOE-030291	C17H16Cl2O5	-	-	-	-	
0.9		11.5	15		phenothrin*	C23H26O3	-	-	-	-	
1.1		9.4	13.8		permethrin, cis-	C21H20Cl2O3	\mathbf{C}	V#	\mathbf{C}	6+15	9
1.3		8.1	10.5		fenoxaprop ethyl ester	C18H16NO5Cl	S	V	\mathbf{V}	50	:
1.5	NI60	2.96	4.1		CL 202,347	C13H19N3O5	-	-	-	-	-
2.8	NI40	10.4	8.9		acrinathrin	C26H21F6NO5	V	V	V#	15	2
3		10.2	-		2,4-D BEP ester*	C17H24Cl2O4	-	-	-	-	-
.3		10.2	15		permethrin, trans-	C21H20Cl2O3	\mathbf{C}	V#	\mathbf{C}	6+15	6
13	NI3700	2.67	8		pyrazon	C10H8ClN3O	С	NR	NR	6-15-50	1-2

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ies	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	CH ₂ C
13	NI1200	13	16	hexachlorophene	C13H6Cl6O2	-	NR	NR	6-15-50	-
14	NI4500	2.5	5	oxadixyl	C14H18N2O4	C	NR	NR	6-15-50	1-2
14		4.2	8.7	pyridaphenthion	C14H17O4N2SP	\mathbf{C}	-	-	-	-
14		2.65	5	famphur	C10H16NO5PS2	C	NR	-	6-15-50	-
14.8	NI600	3.1	7.1	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
14.9		5	8.8	bifenox	C12H9Cl2NO5	\mathbf{C}	\mathbf{C}	P	15+50	2+
14.9	FP50	4	8.4	phosmet	C11H12O4NPS2	C	NR	-	6-15-50	3
15		2.31	3.93	desisopropyl iprodione	C10H6Cl2N3O3	P		-	50	1-2-
15	NP1000	4	4.2	KWG 1342	C14H18ClN3O3	-	-	-	-	-
15.5		4.4	8.5	photodieldrin	C12H8Cl6O	-	C	\mathbf{C}	15+50	2
18	NI75	4.2	6.3	iprodione*	C13H13Cl2N3O3	\mathbf{C}	S#	NR	50	1-2
18.1		-	-	carbofuran-7-phenol-DNP ether	C16H14N2O6	-	-	-	-	-
18.6	NI44	2.62	5.4	ofurace	C14H16NO3Cl	\mathbf{C}	-	-	-	-
8.8	FP39	5.3	9.1	chlorthiophos sulfone	C11H15Cl2O5PS2	\mathbf{C}	С	-	50	3
19.7		31	38	deltamethrin, trans-*	C22H19Br2NO3	-	P#	NR	15	2
19.9		29	38	deltamethrin*	C22H19Br2NO3	\mathbf{C}	S#	P	15	2
24		16.3	-	fluridone	C19H14F3NO	-	NR	NR	6-15-50	-
24	NI21	3.8	6.3	nitralin	C13H19N3O6S	\mathbf{C}	P	P	50	5
29		-	-	cypermethrin*	C22H19Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
31	NI30	2.06	1.98	MB46136	C12H4SO2N4F6Cl2	S	S	V	50	2+
33		14.1	23	cypermethrin*	C22H19Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
36		15.1	25	cypermethrin*	C22H19Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
36.9		14.7	21.4	flucythrinate*	C26H23F2NO4	\mathbf{C}	\mathbf{C}	-	15	2+
37.1		3.6	7.5	myclobutanil alcohol metabolite	C15H17ClN40	S	NR	NR	6-15-50	1-2
10	NI100	9	18	coumaphos	C14H16ClO5PS	\mathbf{C}	NR	C#	6-15-50	5
12		16.1	24	flucythrinate*	C26H23F2NO4	\mathbf{C}	\mathbf{C}	-	15	2+
4		20.3	35	fenvalerate*	C25H22ClNO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
1 5	NI150	8	16	coumaphos oxygen analog	C14H16ClO6P	\mathbf{C}	NR	NR	6-15-50	1-2
51		22.5	40	fenvalerate*	C25H22ClNO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
53		44	-	hydramethylnon*	C25H24F6N4	-	-	-	-	-
53		4.7	11.3	dithianon	C14H4O2N2S2	NR	-	-	-	-
56		-	35	fluvalinate*	C26H22ClF3N2O3	C	\mathbf{C}	_	15	9

Appendix I: PESTDATA Chemicals in Order by OV-225 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ies	
OV-225	with OV-225 Column	OV-101	OV-17	Name	Formula	302	303	304	Ethers	$CH_{2}Cl_{2}$
57	NI300	23	43	PB-7, methylated	C20H25CIN2O3S	-	-	-	-	-
59		25	38	fluvalinate*	C26H22ClF3N2O3	\mathbf{C}	\mathbf{C}	-	15	2
64		27	44	tralomethrin	C22H19Br4NO3	\mathbf{C}	V	S	15	2
87	NI500	25	46	PB-9	C19H25ClN2O2S	V	NR	NR	6-15-50	1-2-3

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column	OV-101		Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.02	NI4	0.03	-	dichlorobenzene, p-	C6H4Cl2	-	\mathbf{C}	\mathbf{C}	6	1
0.02	NI0.1	-	-	hexachloroethane	C2Cl6	-	-	-	-	-
0.03	NI0.2	0.04	-	dibromochloropropane	C3H5Br2Cl	-	-	-	-	-
0.04	NI10	0.06	0.08	CGA 171683	C6H5F4N3O2	C		-	15+50	3
0.04	NI0.1	-	-	hexachlorobutadiene	C4Cl6	-	V#	P	6	1
0.06	NI0.8	0.12	-	hexachlorocyclopentadiene	C5Cl6	-	-	-	-	-
0.07	NI0.1	-	-	1,2,3,5-tetrachlorobenzene	C6H2Cl4	-	P#	-	6	1
0.07	NI0.2	-	-	1,2,4,5-tetrachlorobenzene	C6H2Cl4	-	-	-	-	-
0.07	NP(WB)1.5	-	-	4-chlorobenzeneamine	C6H6ClN	S	NR	NR	6-15-50	1-2-3
0.08	FP2.5	0.07	0.08	dichlorvos	C4H7Cl2O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.09	NP(WB)5	-	0.11	teflubenzuron*	C14H6Cl2F4N2O2	-	NR	NR	6-15-50	1-2-3
0.09	FP1/FP(WB)0.6	0.07	0.25	methamidophos	C2H8NO2PS	V	-	-	-	-
0.09	FP11	0.15	-	vernolate	C10H21NOS	-	P	-	15	-
0.09	NI0.2	-	-	1,2,3,4-tetrachlorobenzene	C6H2Cl4	-	-	-	-	-
0.1	NI(WB)1.4/NP23	0.13	0.15	chlorimuron ethyl ester	C15H15ClN4O6S	P	NR	-	-	-
0.1	HX1.5	0.19	0.08	2-methoxy-3,5,6-trichloropyridine	C6H4Cl3NO	C	P#	\mathbf{C}	6+15	1+2
0.1	NI5	0.17	0.14	N-(3,4-dichlorophenyl)-N'-methylurea	C8H8Cl2N2O	-	NR	NR	6-15-50	-
0.1	NI4	0.22	0.14	3,4-dichlorophenylurea	C7H6Cl2N2O	-	NR	NR	6-15-50	-
0.1	NI0.6	0.11	-	dichlobenil	C7H3Cl2N	C	P	\mathbf{C}	15	2
0.1	NP6	0.17	-	pebulate	C10H21NOS	C	P	-	15	-
0.11	NP20	0.17	-	CGA 236431	C8H7F3N2O2	-	-	-	-	-
0.11	FP0.4	-	-	chlormephos	C5H12ClO2PS2	C	-	-	-	-
0.11	FS30	0.13	0.23	carboxin sulfoxide	C12H13NO3S	-	NR	NR	6-15-50	1-2-3
0.11	NI12	0.11	0.09	diuron	C9H10Cl2N2O	C	NR	NR	6-15-50	1-2-3
0.12	NI0.2	-	-	hexachloronorbornadiene	C7H2Cl6	-	-	-	-	-
0.12	NP16	0.13	-	propham	C10H13NO2	\mathbf{C}	P	P	15	-
0.13	NP8	0.26	-	CGA 236432	C9H9F3N2O2	-	-	-	-	-
0.13	NI1/NP2	0.17	0.22	3-methyl-4-nitrophenol methyl ether	C8H9O3N	-	-	-	-	-
0.13	FP2	0.16	-	mevinphos, (E)-	C7H13O6P	\mathbf{C}	NR	NR	6-15-50	-

^{*} Multipeak chemical.

[#] Recovery may vary with choice of Florisil elution system; see Tables 303-a, 304-a.

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17			OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.13	FP4	0.16	-	trichlorfon	C4H8Cl3O4P	\mathbf{C}	NR	NR	6-15-50	1-2-
0.14	NP(WB)5	0.14	0.23	teflubenzuron*	C14H6Cl2F4N2O2	-	NR	NR	6-15-50	1-2-
0.14	NP50	0.22	-	CGA 72903	C7H6F3N	-	-	-	-	-
0.14	NI1	0.19	0.22	N, N-diallyl dichloroacetamide	C8H11Cl2NO	\mathbf{C}	S	S	15+50	2+3
0.14	NP2	-	-	fluometuron	C10H11F3N2O	-	-	-	-	-
0.14	NP1	0.22	-	CGA 150829	C5H14N4O	\mathbf{V}	-	-	-	-
0.14	HN(WB)0.3/HX(WB)2/NI8/ NI(WB)14/NP8/NP(WB)0.4	0.18	0.27	3,5-dichloroaniline	C6H5Cl2N	S	S	S	6+15	1+2
0.14		0.15	0.15	dimethyl phthalate	C10H10O4	-	P	-	6+15+50	-
0.15	FP2/FP(WB)0.6	0.13	-	mevinphos, (Z)-	C7H13O6P	\mathbf{C}	NR	-	6-15-50	-
0.16	HN(WB)3/NI(WB)120/ NP(WB)7	0.25	0.5	cymoxanil	C7H10N4O3	V	NR	NR	6-15-50	1-2-
0.16	NI0.3	0.24	0.13	pentachlorobenzene	C6HCl5	\mathbf{C}	\mathbf{C}	C	6	1
0.16	NI13/NP8	0.2	0.32	3,4-dichloroaniline	C6H5Cl2N	V	S	-	15	-
0.17	NI0.7	0.34	0.27	trifluralin	C13H16F3N3O4	\mathbf{C}	\mathbf{C}	С	6	2
0.18	FP(WB)2	-	-	metasystox thiono*	C6H15O3PS2	-	-	-	-	-
0.18	HX25	-	-	metoxuron	C10H13ClN2O2	\mathbf{V}	NR	NR	6-15-50	1-2-
0.18	NI0.3	0.23	0.21	methyl 2,3,6-trichlorobenzoate	C8H5Cl3O2	-	-	-	-	-
0.18	HX(WB)1	0.37	0.28	benfluralin	C13H16F3N3O4	\mathbf{C}	\mathbf{C}	С	6	2
0.19	HX6	0.34	0.27	ethalfluralin	C13H14F3N3O4	\mathbf{C}	\mathbf{C}	С	6	2
0.19	FP(WB)0.6	0.15	0.64	acephate	C4H10NO3PS	\mathbf{C}	-	-	-	-
0.2	FP2	-	-	demeton-O*	C8H19O3PS2	\mathbf{C}	NR	-	6-15	-
0.2	NI160/NP30	0.22	0.25	3-carboxy-5-ethoxy-1,2,4-thiadiazole	C3H2N2O3S	NR	-	-	-	-
0.2		-	-	4-chlorobiphenyl	C12H9Cl	-	-	-	-	-
0.2	HN(WB)1/HX(WB)35/ NP(WB)11	0.3	-	triflusulfuron methyl ester	C17H19F3N6O6S	V	NR	NR	6-15-50	1-2-
0.2		-	-	epoxyhexachloronorbornene	C7H2Cl6O	-	-	-	-	-
0.2	HX(WB)0.6	0.2	0.18	nitrapyrin	C6H3Cl4N	\mathbf{C}	C	V	6	2
0.21	FP20	0.26	-	tebuthiuron	C9H16N4OS	-	-	-	-	-
0.21	FP25	0.22	0.32	demeton-O oxygen analog	C8H19O4PS	-	-	-	-	-
0.21	HX(WB)0.8/NI0.4/NP0.5	0.18	0.12	etridiazole	C5H5Cl3N2OS	\mathbf{C}	\mathbf{C}	P	6	2
0.22	NI150	0.18	-	4-hydroxymethyl-3,5-dimethylphenyl methylcarbamate*	C11H15NO3	-	NR	NR	15-50	1-2-

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ C
0.22	NI0.2	-	-	octachlorocyclopentane	C5Cl8	-	-	-	-	-
0.22	HX(WB)0.3	0.24	0.15	2,3,5,6-tetrachloroanisole	C7H4Cl4O	-	\mathbf{C}	-	6	1
0.23	NI0.4	0.26	0.51	RPA 203328, methylated	C10H9F3O4S	-	-	-	-	-
0.23	NI0.2	-	-	heptachloronorbornene	C7H3Cl7	-	-	-	-	-
0.23		0.3	-	tributyl phosphate	C12H27O4P	-	R	-	50	-
0.24	FP150	0.5	0.53	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
0.24	FP0.5/HX0.3/NI0.3	0.33	0.23	chlorethoxyfos	C6H11Cl4O3PS	V	\mathbf{C}	-	6	1
0.24	NI0.3	0.29	0.26	tecnazene	C6HCl4NO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.24	FP(WB)70/NI10000/ NP(WB)70	0.21	0.27	ТЕРР	C8H20O7P2	С	-	-	-	-
0.25		0.3	0.38	2,4-D methyl ester	C9H8Cl2O3	-	-	-	-	-
0.25		0.34	-	2,4,5-trichloro-alpha-methylbenzene methanol	C8H7OCl3	R	R	-	15	-
0.25	FP1	0.33	0.31	ethoprop	C8H19O2PS2	\mathbf{C}	P#	S #	50	1-2
0.25		0.29	-	diphenylamine	C12H11N	\mathbf{C}	S	-	6+15	-
0.25	NI80	0.32	0.43	chlorpropham	C10H12ClNO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
0.26	NI5/NP20	0.38	0.63	3-methyl-4-nitrophenol	C7H7O3N	V	NR	NR	6-15-50	1-2
0.26	NI5/NI(WB)5	0.34	0.37	propachlor	C11H14ClNO	\mathbf{C}	NR	NR	6-15-50	1-2
0.26	FP0.5	0.26	-	thionazin	C8H13N2O3PS	\mathbf{C}	P	NR	15+50	-
0.27		0.2	-	1,2,4-triazole	C2H3N3	V	NR	NR	6-15-50	1-2
0.28	FP3	-	-	demeton-O sulfone*	C8H19O5PS2	\mathbf{C}	-	-	-	-
0.28	HN(WB)0.4/NI(WB)3/ NP(WB)3	0.25	0.92	oxamyl oxime metabolite	C5H10N2O2S	С	NR	NR	6-15-50	1-2
0.29	FP(WB)0.4/NI(WB)12/ NP(WB)0.5	0.37	0.27	cadusafos	C10H23O2PS2	С	NR	NR	6-15-50	1-2
0.29	FP0.5	0.34	-	sulfotep	C8H20O5P2S2	\mathbf{C}	С	P	6+15	2
0.29	NP3	0.28	-	G-27550	C8H12N2O	\mathbf{C}	-	-	-	-
0.29	FP1	0.3	0.37	phorate oxygen analog	C7H17O3PS2	\mathbf{C}	NR	NR	6-15-50	1-2
0.3	NI0.8/NP9	0.53	0.46	profluralin	C14H16F3N3O4	\mathbf{V}	\mathbf{V}	-	6	-
0.31	NI150	0.27	-	4-hydroxymethyl-3,5-dimethylphenyl methylcarbamate*	C11H15NO3	-	NR	NR	15-50	1-2
0.31	FP(WB)4	0.46	0.49	oxydemeton-methyl	C6H15O4PS2	\mathbf{C}	-	-	-	-
0.32	FP(WB)2	0.31	0.49	metasystox thiono*	C6H15O3PS2	-	-	-	-	-

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-17	with OV-17 Column	OV-101	OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
0.32	NI0.4	0.56	0.4	chlordene	C10H6Cl6	-	\mathbf{C}	\mathbf{C}	6	1
0.32	FP(WB)0.8	0.28	0.49	metasystox thiol	C6H15O3PS2	\mathbf{C}	-	-	-	-
0.32	FP20/NI8	0.34	-	naled	C4H7Br2Cl2O4P	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.32	FP0.5/NI14	0.37	0.38	phorate	C7H17O2PS3	\mathbf{C}	V#	V#	6	1
0.33		0.42	0.74	2,4-D isopropyl ester*	C11H12Cl2O3	-	-	-	-	-
0.33		0.42	0.26	di-allate	C10H17CINOS	\mathbf{C}	\mathbf{C}	-	6	-
0.33	HX0.3/NI0.3	0.45	0.25	hexachlorobenzene	C6Cl6	\mathbf{C}	C	P	6	1
0.34	NI0.3	0.46	0.3	pentachlorophenyl methyl ether	C7H3Cl5O	\mathbf{C}	C	\mathbf{C}	6	1
0.35	NI0.3	0.4	0.48	BHC, alpha-	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.36	FP2	0.28	-	demeton-O*	C8H19O3PS2	\mathbf{C}	NR	-	6-15	-
0.36		0.32	0.44	3, 5, 6-trichloro-2-pyridinol methyl ester	C6H4Cl3NO	-	-	-	-	-
0.36	FP0.7	0.34	-	dioxabenzofos	C8H9O3PS	\mathbf{C}	P	-	15	-
0.36	NI1	0.38	0.44	sulfallate	C8H14ClNS2	\mathbf{C}	C	\mathbf{C}	6+15	2
0.37	HX3/NI0.5	0.53	0.76	fluchloralin	C12H13ClF3N3O4	\mathbf{C}	С	-	6	2
0.38	NP4	0.35	0.6	2,3,5-trimethacarb	C11H15NO2	\mathbf{C}	S#	NR	50	1-2-3
0.38	FP4/FP(WB)1	0.39	0.53	fonofos oxygen analog	C10H15O2PS	V	NR	NR	6-15-50	1-2-3
0.39		0.36	0.36	triclopyr methyl ester	C8H6Cl3NO3	-	-	-	-	-
0.39	NI1/NP1.8	0.46	0.6	furilazole	C11H13Cl2NO3	\mathbf{C}	S	-	50	3
0.39	FP1/NI2500	0.42	-	terbufos oxygen analog	C9H21O3PS2	\mathbf{C}	-	NR	6-15-50	1-2-3
0.39	FP5/FP(WB)1.1	0.25	1.11	omethoate	C5H12NO4PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.4	HN(WB)30	0.35	2.85	ethametsulfuron methyl ester*	C15H18N6O6S	-	NR	NR	6-15-50	1-2-3
0.4	NI1/NP85	0.51	0.84	pronamide	C12H11Cl2NO	\mathbf{C}	P	-	15+50	-
0.4	FP0.4/NP(WB)1	0.41	0.51	thiometon	C6H15O2PS3	\mathbf{C}	NR	NR	6-15-50	-
0.41	NP24	0.35	0.7	methabenzthiazuron	C10H11N3OS	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.41	NP40	0.32	-	phenmedipham	C16H16N2O4	-	-	-	-	-
0.41	FP0.5/FP(WB)1.6/NI20	0.5	0.44	terbufos	C9H21O2PS3	\mathbf{C}	P	S	6	-
0.41	NI43	0.53	0.65	propazine	C9H16ClN5	C	S	NR	15+50	3
0.41	FP0.8/FP(WB)0.8	0.41	0.56	demeton-S	C8H19O3PS2	\mathbf{C}	NR	-	6-15-50	-
0.42	FP0.5	0.48	-	propetamphos	C10H20NO4PS	\mathbf{C}	С#	-	15+50	2+3
0.42	NP9	0.42	-	melamine	C3H6N6	NR	-	-	-	-
0.43	FP1/FP(WB)0.8	0.31	0.96	dicrotophos	C8H16NO5P	\mathbf{C}	NR	-	6-15-50	-

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column	OV-101		Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.44	NI150	0.5	0.79	metribuzin, deaminated diketo metabolite*	C7H11N3O2	NR	NR	NR	6-15-50	1-2-
0.44	FP150	2	0.93	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
0.44	NI1	0.52	0.93	dinitramine	C11H13F3N4O4	\mathbf{C}	-	P	15	-
0.44	NI20	0.43	0.74	atrazine	C8H14ClN5	\mathbf{C}	S#	NR	50	1-2-
0.44	FP0.7	0.52	0.56	fonofos	C10H15OPS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2+3
0.44	FP0.7/FP(WB)0.9/NI4/ NP0.25	0.51	0.4	diazinon	C12H21N2O3PS	С	С	С	15	3
0.45	NP430	0.9	-	formetanate hydrochloride	C11H16ClN3O2	-	-	-	-	-
0.45	NI3	0.5	0.59	pentachlorobenzonitrile	C7Cl5N	\mathbf{C}	\mathbf{C}	P	15	2
0.45	NI1000/NP218	0.44	0.29	desmedipham	C16H16N2O4	-	-	-	-	-
0.45		0.6	-	tri-allate	C10H16Cl3NOS	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
0.45	HN(WB)0.4	0.42	0.75	chlorbufam	C11H10ClNO2	\mathbf{C}		-	15	2+3
0.45	NI0.4	0.42	0.96	dicloran	C6H4Cl2N2O2	\mathbf{C}	S	P	15+50	2+3
0.46	HX2/NP11	0.45	0.59	clomazone	C12H14ClNO2	\mathbf{C}		-	50	3
0.46	FP1	0.54	0.6	disulfoton	C8H19O2PS3	\mathbf{C}	P#	NR	6	1-2-
0.46	NI0.5	0.51	0.46	quintozene	C6Cl5NO2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.47	NI(WB)1	0.56	0.49	methyl 3,5-dibromo-4-methoxy= benzoate	C9H8Br2O3	-	-	-	-	-
0.47		0.49	0.63	2,4,5-T methyl ester	C9H7Cl3O3	-	-	-	-	-
0.47	NP100	0.4	-	CGA 37734	C10H13NO2	\mathbf{C}	NR	NR	6-15-50	1-2-
0.47	NI30/NP0.6	0.5	0.53	diazinon oxygen analog	C12H21N2O4P	\mathbf{C}	NR	NR	6-15-50	1-2-
0.47	NI0.4	0.48	0.69	lindane	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.48	NI1.1/NP1.2	0.5	0.69	4-(dichloroacetyl)-1-oxa-4-azapiro= [4.5]decane	C10H15Cl2NO2	С	P	-	50	3
0.48	HX(WB)0.3	0.49	0.35	1,2,4,5-tetrachloro-3-(methylthio)= benzene	C7H4Cl4S	R	С	-	6	1
0.48	NI250	0.47	0.71	terbuthylazine	C9H16N5Cl	\mathbf{C}	P	-	15+50	-
0.48	HX18	0.48	0.91	monolinuron	C9H11ClN2O2	\mathbf{C}	-	-	-	-
0.49	HN(WB)5	0.42	0.97	PPG-947, methylated*	C18H13ClF3NO7	-	-	-	-	-
0.49	NP3	0.46	-	CGA 51702	C9H9F3N2O	-	-	-	-	-
0.49		0.62	0.62	2,4-D isobutyl ester	C12H14Cl2O3	-	-	-	-	-
0.5		0.5	2.02	tris(chloropropyl) phosphate	C9H18Cl3O4P	\mathbf{C}	NR	NR	6-15-50	1-2-

RRT/c	Detector Responses	RRT/c	RRT/c	•	Molecular			Recover	ries	
OV-17	with OV-17 Column		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.5	FP2/FP(WB)0.8	0.31	1.6	monocrotophos	C7H14NO5P	С	NR	NR	6-15-50	1-2-3
0.5	NP10	0.45	0.78	3,4,5-trimethacarb	C11H15NO2	С	NR	NR	50	1-2-3
0.5	NI56/NP(WB)1.5	0.41	0.83	simazine	C7H12ClN5	С	NR	NR	50	1-2-3
0.5	FP7/FP(WB)13	0.47	-	dioxathion	C12H26O6P2S4	V	NR	-	6-15-50	2
0.51		-	-	4,4'-dichlorobiphenyl	C12H8Cl2	-	-	-	-	-
0.51	NI50	0.58	0.59	etrimfos	C10H17N2O4PS	C	C	\mathbf{C}	15	2+3
0.52	NI150	0.73	1.29	metribuzin, deaminated diketo metabolite*	C7H11N3O2	NR	NR	NR	6-15-50	1-2-3
0.52		0.39	1.3	2,6-dichlorobenzamide	C7H5NOCl2	\mathbf{C}	NR	NR	6-15-50	1-2-3
0.52	FP1	0.58	-	schradan	C8H24N4O3P2	\mathbf{C}	NR	-	6-15-50	-
0.53	NP(WB)25	0.47	0.42	terbumeton	C10H19N5O	\mathbf{C}	-	-	-	-
0.53	HN(WB)0.1/HX12	0.3	0.8	desethyl simazine	C5H8ClN5	-	NR	NR	50	1-2-
0.54	FP2	0.6	-	iprobenfos	C13H21O3PS	C	-	-	-	-
0.54	NI(WB)16	0.39	1.16	4-chlorobenzylmethyl sulfoxide	C8H9ClOS	-	NR	NR	6-15-50	1-2-
0.55	NI6/NP20	0.56	1.41	metribuzin, diketo metabolite	C7H12N4O2	NR	NR	NR	6-15-50	1-2-
0.56	HX(WB)0.5	0.56	0.63	2,3,5,6-tetrachloronitroanisole	C7H3Cl4NO3	-	\mathbf{C}	-	6	1+5
0.56	NI1	0.43	1.62	BHC, beta-	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.56	FP0.8/HX(WB)2	0.67	0.64	dichlofenthion	C10H13Cl2O3PS	\mathbf{C}	C	V	6	2
0.56		0.65	0.61	diisobutyl phthalate	C16H2204	-	P	-	15+50	-
0.57	FP2	0.53	-	phosphamidon*	C10H19ClNO5P	C	NR	NR	6-15-50	1-2-
0.58	NP24	0.7	-	CP 51214	C14H21NO3	\mathbf{C}	NR	NR	6-15-50	1-2-
0.59	FP(WB)0.7/NP(WB)1	0.47	-	cyanophos	C9H10O3NSP	\mathbf{C}	-	-	-	-
0.6	HN(WB)0.4/HX(WB)4/ NI(WB)36/NP(WB)2	0.43	1.34	6-chloro-2,3-dihydro-3,3,7-methyl-5H-oxazolo(3,2-a)pyrimidin-5-one	C9H13ClN2O2	-	NR	NR	6-15-50	1-2-
0.6	NI0.4	0.83	0.52	heptachlor	C10H5Cl7	C	C	\mathbf{C}	6	1
0.61	HN(WB)0.1/HX25	0.2	0.86	desdiethyl simazine	C3H4ClN5	-	NR	NR	6-15-50	1-2-
0.62	NP50	-	-	CGA 27092	C8H7F3N2O	-	-	-	-	-
0.62	NP14	1.09	-	fenpropimorph	C20H33NO	\mathbf{C}		-	50	1-2-
0.62		0.54	1.47	fenfuram	C12H11NO2	C	-	-	-	-
0.62	FP135	0.43	-	fenthion oxygen analog sulfoxide	C10H15O5PS	\mathbf{C}	NR	NR	6-15-50	1-2-
0.62	FP5/FP(WB)1	0.64	1.02	ronnel oxygen analog	C8H8Cl3O4P	\mathbf{C}	NR	-	6-15-50	-
0.62	FP0.8/FP(WB)0.8/NI5	0.4	1.6	dimethoate	C5H12NO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ C
0.63		0.51	0.8	etrimfos oxygen analog	C10H17N2O5P	\mathbf{C}	-	-	-	-
0.63	FP(WB)1/NI10/NP0.2	0.55	0.8	isazofos	C9H17ClN3O3PS	\mathbf{C}	С#	-	50	2+3
0.64	NI120	0.44	2.49	prosulfuron*	C15H16F3N5O4S	-	NR	NR	6-15-50	1-2-
0.64	HX1/NI2	0.69	1.15	vinclozolin	C12H9Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
0.64		0.66	-	octhilinone	C11H19NOS	\mathbf{C}	-	-	-	-
0.66	HN(WB)6/HX(WB)9/ NI(WB)10/NP(WB)19	0.74	1.2	vinclozolin metabolite B	C12H11Cl2NO4	С	P #	С	6+15	2
0.66	HX0	0.54	-	4-chloro-6-methoxyindole	C9H8NOCl	-	R	-	15	-
0.66	HX(WB)0.6	0.59	0.73	2,3,5,6-tetrachloroanisidine	C7H5Cl4NO	-	\mathbf{C}	-	6	2
0.66	NP(WB)50	0.94	0.97	prodiamine	C13H17F3N4O4	\mathbf{C}	-	-	-	-
0.66	NI(WB)0.8	0.41	1.91	4-chlorobenzylmethyl sulfone	C8H9ClO2S	-	NR	NR	6-15-50	1-2
0.66	FP10	0.55	1.71	parathion-methyl oxygen analog	C8H10NO6P	-	NR	NR	6-15-50	1-2
0.66	NI0.6/NP10	0.67	0.79	pentachloroaniline	C6H2Cl5N	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
0.66	NI4500/NP64	0.5	2.33	ethylenethiourea	C3H6N2S	S	NR	NR	6-15-50	1-2
0.67	NP6	0.73	-	CP 108064, methylated	C15H21NO4	-	-	-	-	-
0.67	NI0.6	0.82	0.64	chlordene, alpha-	C10H6Cl6	-	-	-	-	-
0.67	NI5	0.75	0.88	acetochlor	C14H20NO2Cl	\mathbf{C}	С#	P	50	3
0.67	NI0.5	0.5	1.71	BHC, delta-	C6H6Cl6	\mathbf{C}	\mathbf{C}	\mathbf{C}	6+15	1
0.68	NP2	0.58	-	cyromazine	C6H10N6	S	-	-	-	-
0.68	NI0.6/NP2	0.75	0.8	CGA 14128	C12H21N2O4PS	\mathbf{C}		-	50	1-2
0.68	NP(WB)65	1.1	-	nitrothal-isopropyl	C14H17O6N	\mathbf{C}	-	-	-	-
0.69	HX10	0.67	1.44	metobromuron	C9H11BrN2O2	\mathbf{C}	NR	NR	6-15-50	1-2
0.7	NI1/NP7	0.64	1.06	benoxacor	C11H11Cl2NO2	\mathbf{C}	P	\mathbf{C}	15+50	2+
0.7	NI12/NP15	0.6	1.64	ethoxyquin	C14H19N0	\mathbf{C}	NR	NR	6-15-50	-
0.71	NI8/NP10	0.45	2.25	methidathion sulfoxide	C5H8N2O4S2	-	NR	NR	6-15-50	1-2
0.71	NI10	0.71	1.11	dimethachlor	C13H18ClNO2	\mathbf{C}	-	-	-	-
0.71	FS(WB)80/HN(WB)0.4/ HX500/NI300	0.4	-	dazomet	C5H10N2S2	S	NR	-	6-15-50	1-2
0.72	NP1000	-	-	1-methyl cyromazine	C7H13N6	-	-	-	-	-
0.72	NI6	0.8	1	alachlor	C14H2OCINO2	\mathbf{C}	\mathbf{C}	С#	50	3
0.72	HN(WB)0.6/HX(WB)5/ NI(WB)2/NP(WB)8	0.54	2.1	terbacil	C9H13ClN2O2	С	NR	NR	6-15	2+

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl
0.73	FP(WB)2	0.61	-	pirimicarb	C11H18N4O2	\mathbf{C}	-	-	-	-
0.74		0.64	1.22	cyprazine	C9H14ClN5	C	-	-	-	-
0.74	FP20	0.77	-	prometryn	C10H19N5S	\mathbf{C}	P#	P #	50	1-2-3
0.74	HX1/NI2	0.55	1.44	chlorothalonil	C8Cl4N2	S	С#	C#	6-15-50	2+3
0.75	HX0.8/HX(WB)0.4	0.81	0.85	tridiphane	C10H7Cl5O	С	C	-	6	1+2
0.76	FP2	0.67	-	phosphamidon*	C10H19ClNO5P	С	NR	NR	6-15-50	1-2-3
0.76	NI1	1.05	0.58	aldrin	C12H8Cl6	C	\mathbf{C}	\mathbf{C}	6	1
0.76	FP1/NI1	0.81	0.86	ronnel	C8H8Cl3O3PS	C	\mathbf{C}	\mathbf{C}	6	2
0.78	NP133	0.6	1.4	ethiofencarb	C10H15NO2S	C	NR	NR	6-15-50	-
0.78	NI4	0.66	2.82	propanil	C9H9Cl2NO	\mathbf{C}	NR	NR	6-15	3
0.79	HN(WB)1/HX(WB)2/ NI(WB)1/NP(WB)7	0.69	2.01	vinclozolin metabolite S	C10H7Cl2NO3	V	P	V #	15	2
0.79	FP(WB)1.5	0.72	0.86	chlorpyrifos-methyl	C7H7Cl3NO3PS	\mathbf{C}	С	-	6	2
0.79		0.75	1.55	prothoate	C9H20NO3PS2	C	-	-	-	-
0.8	HN(WB)0.2/NP(WB)13	0.7	-	IN-B2838	C10H15N3O3	P	NR	NR	6-15-50	1-2-
0.81	FS1.5	0.41	2.71	dimethipin	C6H10O4S2	\mathbf{C}	NR	NR	6-15-50	1-2-
0.82	NI200/NP35	0.56	2.29	methidathion sulfone	C5H8N2O3S2	-	NR	NR	6-15-50	1-2-
0.82		-	-	butylisodecyl phthalate	C22H34O4	-	-	-	-	-
0.82	NP7	0.44	-	isocarbamid	C8H15N3O2	С	-	-	-	-
0.83	FP10	0.72	-	fenitrothion oxygen analog	C9H12NO6P	\mathbf{C}	-	-	-	-
0.84		0.88	0.92	dibutyl phthalate	C16H22O4	-	C	\mathbf{C}	15+50	-
0.86		-	-	2,4,5-T butyl esters*	C12H13Cl3O3	-	-	-	-	-
0.86	HX3	0.96	1.45	nitrofluorfen	C13H7ClF3NO3	\mathbf{C}	C	\mathbf{C}	15	2
0.86	FP4/NI15	0.8	-	parathion oxygen analog	C10H14NO6P	\mathbf{C}	NR	NR	6-15-50	1-2-
0.87	NI3	0.94	0.69	pentachlorophenyl methyl sulfide	C7H3Cl5S	\mathbf{C}	C	\mathbf{C}	6	1
0.87	FP5	0.68	1.55	malathion oxygen analog	C10H19O7PS	C	NR	NR	6-15-50	1-2-
0.87	FP2/FP(WB)1/NI3	0.71	1.64	parathion-methyl	C8H10NO5PS	\mathbf{C}	C	\mathbf{C}	15	2
0.88	NI1	0.98	0.89	chlordene, gamma-	C10H6Cl6	-	-	-	-	-
0.88	HN(WB)48/HX(WB)390/ NI(WB)27/NP(WB)1000	1.05	1.47	acifluorfen	C14H7ClF3NO3	-	NR	NR	6-15-50	1-2-
0.89	NI1	0.98	0.84	chlordene, beta-	C10H6Cl6	-	-	-	-	-
0.89	NP(WB)2	0.73	-	cymiazole	C12H14N2S	_	-	-	-	_

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ C
0.89	NP(WB)10	-	-	isoproturon	C12H18N2O	S	-	-	-	-
0.9	HN(WB)3/HX(WB)23/ NI(WB)23/NP(WB)44	0.42	-	pyrazon metabolite B	C6H4ClN3O	-	NR	NR	6-15-50	1-2-
0.9	NI100/NP300	0.6	2.65	CGA 120844	C8H9NSO3	-	NR	NR	6-15-50	1-2-
0.9	NI1000/NP50	0.81	-	metalaxyl	C15H21NO4	C	NR	NR	6-15-50	1-2-
0.9	HN(WB)15/NI(WB)80/ NP(WB)30	0.55	1.41	3-ketocarbofuran	C12H12NO4	S	NR	NR	6	1
0.91	HX2	4.1	1.08	dicofol, o,p'-*	C14H9Cl5O	\mathbf{C}	V	S	6+15	2
0.91	NI0.4/NP11	0.57	1.47	metribuzin	C8H14N4OS	V	NR	NR	50	1-2
0.91	FP(WB)10	-	-	formothion	C6H12NO4PS2	\mathbf{C}	NR	NR	6-15-50	1-2
0.92	FP2/FP(WB)1.2	0.87	-	pirimiphos-methyl	C11H20N3O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	3
0.92	NI2	0.82	1.07	dichlorobenzophenone, o,p'-	C13H8Cl2O	-	С	C	15	2
0.93	HN(WB)3/HX(WB)3/ NI(WB)4/NP(WB)7	0.89	3.02	vinclozolin metabolite E	C11H11Cl2NO2	С	S	NR	15+50	-
0.93	FS54/NI4.5	0.68	2.89	2,3-dihydro-3,3-methyl-2-oxo-5- benzofuranyl methyl sulfonate	C11H12O5S	-	-	-	-	-
0.93	HX7	1.03	1.21	metolachlor	C15H22CINO2	\mathbf{C}	S#	NR	50	1-2
0.93	NI6/NP15	1.15	1.22	butralin	C14H21N3O4	V	C	-	6+15+50	-
0.95	HN(WB)30	0.55	3.6	ethametsulfuron methyl ester*	C15H18N6O6S	-	NR	NR	6-15-50	1-2
0.95	NP5.5	0.71	-	fuberidazole	C11H8N2O	\mathbf{C}	-	-	-	-
0.95		0.85	2.13	linuron	C9H10Cl2N2O2	V	V#	V	50	3
0.96	FP3	0.71	2.95	demeton-O sulfone*	C8H19O5PS2	\mathbf{C}	-	-	-	-
0.96	NI1/NP5	0.99	1.91	KWG 1323	C14H16ClN3O3	\mathbf{C}	NR	NR	6-15-50	1-2
0.96	NP16	0.97	-	difenoxuron	C16H18N2O3	-	-	-	-	-
0.97		1.13	-	trichloronat	C10H12Cl3O2PS	\mathbf{C}	C	-	6	-
0.98	HX3	0.94	1	thiobencarb	C12H16CINOS	\mathbf{C}		V	15	2+
0.99	NI1/NP9	0.77	1.62	Tycor	C9H16N4OS	\mathbf{C}	S	S	50	3
1	HX5/HX5/HX(WB)3/ NI(WB)2/NP2/NP(WB)3	1.05	1.64	triadimefon	C14H16ClN3O2	С	S #	S#	50	1-2
1	FP2/NI2	1	1	chlorpyrifos	C9H11Cl3NO3PS	\mathbf{C}	\mathbf{C}	P	6	2
1	NI1	1.06	1.13	DCPA	C10H6Cl4O4	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
1.01	NI3/NP15	1.14	1.24	isopropalin	C15H23N3O4	\mathbf{C}	\mathbf{C}	-	6	-
1.01		0.9	1.71	dichlofluanid	C9H11Cl2FN2O2S2	С	С#	-	15+50	2+

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-17	with OV-17 Column	OV-101		Name	Formula	302	303	304	Ethers	CH ₂ Cl
1.02	FS65/NI333	0.86	1.93	ethofumesate	C13H18O5S	\mathbf{C}	-	-	-	-
1.02	FP6	0.66	-	phorate oxygen analog sulfone	C7H17O5PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
1.03	NP600	0.8	-	3-hydroxymethyl-2,5-dimethylphenyl methylcarbamate	C11H15NO3	-	NR	NR	6-15-50	1-2-
1.04	NI4	0.55	0.86	tetraiodoethylene	C2I4	-	P	P	6	-
1.05		-	-	2,4,5-T butyl esters*	C12H13Cl3O3	-	-	-	-	-
1.05		0.87	-	demeton-O sulfoxide	C8H15O4PS2	\mathbf{C}	-	-	-	-
1.05	NI0.6	1.33	0.94	octachlor epoxide	C10H4Cl8O	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.05	NP(WB)8	-	-	norea	C13H15N2O	\mathbf{C}	-	-	-	-
1.05	FP3/FP(WB)1.1	0.84	1.82	fenitrothion	C9H12NO5PS	\mathbf{C}	C	\mathbf{C}	15	2
1.05	FP3/NI7	0.91	1.49	malathion	C10H19O6PS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	15+50	3
1.05		0.75	-	carbaryl	C12H11NO2	\mathbf{C}	-	-	-	-
1.06	FP40	0.78	-	phorate oxygen analog sulfoxide	C7H17O4PS2	\mathbf{C}	NR	NR	6-15-50	1-2
1.06	NI10/NP125	0.83	3.77	metribuzin, deaminated metabolite	C8H13N3OS	\mathbf{C}	NR	NR	6-15-50	1-2
1.07		0.87	-	4-chlorophenoxyaniline*	C12H10ClNO	S	-	-	-	-
1.07	NI1	0.99	1.63	1-hydroxychlordene	C10H6Cl6O	-	R	-	15	-
1.07	FP2/NI4	0.98	1.91	parathion	C10H14NO5PS	\mathbf{C}	C	\mathbf{C}	15	2
1.07	NI(WB)40	0.54	-	4-chlorophenylurea	C7H7ClN2O	NR	NR	NR	6-15-50	1-2
1.08	HX3	4.4	1.28	dicofol, p,p'-*	C14H9Cl5O	\mathbf{C}	V	P#	6+15	1+
1.08		0.95	1.51	chlorpyrifos oxygen analog	C9H11Cl3NO4P	\mathbf{C}	NR	-	6-15-50	-
1.08	NI2	0.99	1.25	dichlorobenzophenone, p,p'-	C13H8Cl2O	-	C	\mathbf{C}	15	2
1.09	NI1/NP6	1.25	8	MB45950	C12H4SN4F6Cl2	S	P	\mathbf{V}	15+50	2+
1.12	NI2	1.37	1.22	S-bioallethrin	C19H26O3	-	\mathbf{C}	-	50	-
1.12	FP9	0.78	-	fenthion oxygen analog	C10H15O4PS	\mathbf{C}	NR	NR	6-15-50	1-2
1.13	NI(WB)600	1.04	-	PPG-947	C17H11ClF3NO7	-	NR	NR	6-15-50	1-2
1.14	FP(WB)2.4	1.01	-	pirimiphos-ethyl oxygen analog	C13H24N3O4P	\mathbf{C}	-	-	-	-
1.14	FP3/NI4	1.14	1.03	pirimiphos-ethyl	C13H24N3O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15+50	3
1.15	HX0.9/NI2	1.29	1.22	heptachlor epoxide	C10H5Cl7O	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
1.16	NI1/NP5	1.35	8.7	fipronil	C12H4Cl2F6N4OS	S	S	\mathbf{V}	50	3
1.16	FP3/NI2	1.11	1.29	bromophos	C8H8BrCl2O3PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	-
1.17		0.8	-	methiocarb sulfone	C11H15NO4S	S	NR	NR	6-15-50	1-2
1.18	NP1000	3	-	NTN33823	C9H11N4Cl	-	NR	NR	6-15-50	1-2

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	eries	
OV-17	with OV-17 Column		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ C
1.18	FP3	0.96	1.46	fenthion	C10H15O3PS2	\mathbf{C}	S#	NR	6+15	1-2-
1.19	HX13/HX(WB)2/NI(WB)3/ NP(WB)3	1.44	2.23	triflumizole	C15H15ClF3N3O	С	-	-	-	-
1.2	NI2	1.19	1.15	TDE, o,p'-, olefin	C14H9Cl3	-	-	-	-	-
1.21	NI1.5/NP6	1.22	1.48	pendimethalin	C13H19N3O4	\mathbf{C}	C	P	15	2
1.24	FP7	1.17	1.74	isofenphos oxygen analog	C15H24NO5P	\mathbf{C}	-	-	-	-
1.26	FP6	0.89	2.55	phorate sulfoxide	C7H17O3PS3	\mathbf{C}	NR	NR	6-15-50	1-2
1.28	FP2/NI60	0.92	2.9	terbufos oxygen analog sulfone	C9H21O5PS2	\mathbf{C}	NR	NR	6-15-50	1-2
1.29	FP(WB)2/NI3	1.21	1.58	chlorfenvinphos, alpha-	C12H14Cl3O4P	\mathbf{C}	-	NR	6-15-50	-
1.3	FP2	0.97	3.26	phorate sulfone	C7H17O4PS3	\mathbf{C}	S#	S#	6-15-50	3
1.3	FP2/NI3	1.08	2.33	crufomate	C12H19ClNO3P	\mathbf{C}	NR	NR	6-15-50	-
1.31		1.28	-	4-chlorophenoxyaniline*	C12H10ClNO	S	-	-	-	-
1.32	HX3/HX(WB)2/NI(WB)2/ NP(WB)3	1.24	-	penconazole	C13H15Cl2N3	С	-	-	-	-
1.32		0.96	-	carbetamide	C12H16N2O3	-	-	-	-	-
1.32	HN(WB)1/NP(WB)50	1.4	-	dinobuton	C14H18N2O7	\mathbf{C}	-	-	-	-
1.33	NI40/NP200	1.11	4.7	isoxaflutole (prop)	C15H12SNO4F3	NR	V#	S#	50	3
1.34	NI0.6	1.49	1.46	chlordane, trans-	C10H6Cl8	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.36	NP250	0.21	-	3-(3,4-dichlorophenyl)-1-methoxyure	a C8H8Cl2N2O2	R	NR	NR	6-15-50	
1.36	HN(WB)1/HX(WB)8/ NI(WB)6/NP(WB)5	0.8	4.8	bromacil	C9H13BrN2O2	С	NR	NR	6-15-50	1-2
1.38	NI40/NP250	1.13	4.7	RPA202248	C15H12SNO4F3	NR	NR	NR	6-15-50	1-2
1.38	FP2	1.36	1.73	isofenphos	C15H24NO4PS	\mathbf{C}	\mathbf{C}	-	15+50	-
1.39	NP(WB)10	1.18	-	cyprodinil	C14H15N3	\mathbf{C}	NR	NR	6-15-50	1-2
1.4	HX(WB)6/NI4.5	1.55	-	haloxyfop methyl ester	C16H13ClF3NO4	-	-	-	-	-
1.41		1.25	-	tolylfluanid	C10H13ClFNOS	\mathbf{C}	-	-	-	-
1.42	HX0.4/NI0.8	1.75	1.45	nonachlor, trans-	C10H5Cl9	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.42		1.27	3.39	chlorbromuron	C9H10BrClN2O2	V	V	V	50	3
1.43	FP25	1.34	0.65	merphos*	C12H27PS3	-	\mathbf{C}	\mathbf{C}	6+15+50	3
1.43	FP(WB)12	0.93	-	des N-isopropyl isofenphos oxygen analog	C12H18NO5P	-	-	-	-	-
1.43	NP6	1.05	-	pyracarbolid	C13H15NO2	-	-	-	-	-
1.44	NI5	-	1.67	2,4-D butoxyethyl ester*	C14H18Cl2O4	-	-	-	-	-

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-17	with OV-17 Column	OV-101	OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl
1.44	HX7/HX(WB)4/NI(WB)50/ NP(WB)6	1.36	-	triadimenol	C14H18CIN3O2	С	NR	NR	6-15-50	-
1.45	FP(WB)0.3	1.51	1.42	bromophos-ethyl	C10H12BrCl2O3PS	\mathbf{C}	\mathbf{C}	P	6	-
1.45	NI4	1.45	1.36	TDE, p,p'-, olefin	C14H9Cl3	\mathbf{C}	C	\mathbf{C}	6	1
1.46	FS88/NI96	1	6.6	2-hydroxy-2,3-dihydro-3,3-methyl-5- benzofuranyl methyl sulfonate	C11H14O5S	-	-	-	-	-
1.46	HX5/NP4	1.5	-	metazachlor	C14H16ClN3O	\mathbf{C}	-	-	-	-
1.46	HX9	1.73	1.83	butachlor	C17H26ClNO2	\mathbf{C}	\mathbf{C}	-	50	-
1.47	HX1/NI2	1.64	1.38	endosulfan I	C9H6Cl6O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
1.47	NP20	1.24	1.88	anilazine	C9H5Cl3N4	V	S	P	15+50	2+3
1.48	NI5	-	-	2,4-D isooctyl ester*	C16H22Cl2O3	-	-	-	-	-
1.48	HX6	0.89	4.9	cyanazine	C9H13ClN6	\mathbf{C}	NR	-	6-15-50	-
1.48	FP(WB)3	0.72	-	oxydemeton-methyl sulfone	C6H15O5PS2	\mathbf{C}	-	-	-	-
1.48	NI0.8	1.66	1.54	chlordane, cis-	C10H6Cl8	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.49	HX1	1.37	3.04	procymidone	C13H11Cl2NO2	\mathbf{C}	\mathbf{C}	P	15	-
1.5	FP3	1.21	2.73	des N-isopropyl isofenphos	C12H18NO4PS	\mathbf{C}	S	-	50	-
1.51	NI1	1.55	1.28	DDE, o,p'-	C14H8Cl4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.52	FP4/FP(WB)2/NI3	1.29	2	chlorfenvinphos, beta-	C12H14Cl3O4P	\mathbf{C}	S#	-	50	1-2-
1.54	NI1000	1.39	1.89	CGA 189138	C13H8O3Cl2	-	-	-	-	-
1.54		1.15	4.3	CGA 91305	C10H8Cl2N3O	V	NR	NR	6-15-50	1-2
1.54	HX3/NI1	1.39	1.62	chlorbenside	C13H10Cl2S	\mathbf{C}	S	P	6	1
1.55	HN(WB)3/HX(WB)17/ NI(WB)19/NP(WB)12	0.86	-	6-chloro-2,3-dihydro-7-hydroxy= methyl-3,3-methyl-5H-oxazolo= (3,2-a)pyrimidin-5-one	C9H13CIN2O3	-	NR	NR	6-15-50	1-2-
1.55	NP(WB)25	1.1	-	diphenamid	C16H17NO	V	NR	-	6-15	-
1.56	NP4	1.16	-	phenothiazine	C12H9NS	-	-	-	-	-
1.58	FP2/NI10	1.2	-	terbufos sulfone	C9H21O4PS3	\mathbf{C}	С#	C#	6-15-50	2+
1.58	FP3/FP(WB)1.9	1.28	2.67	mecarbam	C10H20NO5PS2	\mathbf{C}		-	50	-
1.59	NI1000	6.7	-	CGA 205375	C16H13N3O2Cl2	-	-	-	-	-
1.59	HX7/HX(WB)3/NI(WB)85/ NP(WB)5	1.52	-	paclobutrazol	C15H20ClN3O	С	-	-	-	-
1.6	NI1000	1.28	-	3-phenoxybenzenemethanol	C13H12O2	-	-	-	-	-
1.64	NI6/NP30	1.57	1.84	cyclanilide methyl ester	C12H11Cl2NO3	-	-	-	_	_

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column	OV-101	OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl
1.64	FP3/FP(WB)3	1.32	2	quinalphos	C12H15N2O3PS	С	С	-	15	-
1.65		1.65	-	DDMS	C14H11Cl3	-	R	-	6	-
1.66	FP10/NI120/NP7	1.08	3	fosthiazate	C9H18NO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
1.68		2.1	1.78	2,4-D ethyl hexyl ester*	C16H22Cl2O3	-	-	-	-	-
1.75	FP5	1.15	5.8	demeton-S sulfone	C8H19O5PS2	\mathbf{C}	-	-	-	-
1.76		2.12	1.76	pyrethrins*	C21H27O4	-	\mathbf{C}	\mathbf{C}	50	-
1.78	NI5	2.04	1.78	2,4-D isooctyl ester*	C16H22Cl2O3	-	-	-	-	-
1.79	NI5	1.82	2.08	2,4-D butoxyethyl ester*	C14H18Cl2O4	-	-	-	-	-
1.79	NP(WB)23	1.86	2.91	hexaconazole	C14H17Cl2N3O	\mathbf{C}	-	-	-	-
1.8	FP125/NI200/NP40	1.07	-	methidathion oxygen analog	C6H11N2O5PS2	-	NR	NR	6-15-50	1-2-
1.82	NI3	1.85	1.74	prothiofos	C11H15Cl2PO2S2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
1.83	FP2/FP(WB)2.6/NI5	1.31	2.05	phenthoate	C12H17O4PS2	\mathbf{C}	\mathbf{C}	-	15+50	-
1.84	HX1.5/NI1	1.91	1.87	dieldrin	C12H8Cl6O	\mathbf{C}	C	\mathbf{C}	15	2
1.85		1.57	-	oxythioquinox	C10H6N2OS2	\mathbf{C}	-	-	-	-
1.85	NI2	1.2	3.49	captan	C9H8Cl3NO2S	\mathbf{C}	P	\mathbf{C}	50	3
1.86	HN(WB)120/HX(WB)66/ NI(WB)78	1.9	3.16	PPG-2597	C20H17CIF3NO6	-	NR	NR	6-15-50	1-2
1.86	NI1	1.92	1.59	DDE, p,p'-	C14H8Cl4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
1.88	FP25	1.95	1.64	merphos*	C12H27PS3	-	\mathbf{C}	\mathbf{C}	6+15+50	3
1.88		1.73	-	chlorflurecol methyl ester	C15H11ClO3	\mathbf{C}	-	-	-	-
1.88	FP3/NI3	1.95	1.65	tribufos	C12H27OPS3	\mathbf{C}	\mathbf{C}	P	15+50	3
1.9	FP10/FP(WB)3	1.37	2.85	crotoxyphos	C14H19O6P	\mathbf{C}	NR	NR	6-15-50	1-2
1.92		1.26	3.5	Sulphenone	C12H9ClO2S	\mathbf{C}		-	50	3
1.94	NI9	1.23	3.01	folpet	C9H4Cl3O2NS	\mathbf{C}	\mathbf{C}	P	15+50	2+
1.96	NI2	1.97	2.48	oxadiazon	C15H18Cl2N2O3	\mathbf{C}	\mathbf{C}	P	15	-
1.97	FP10/FP(WB)3	1.58	2.72	Gardona	C10H9Cl4O4P	\mathbf{C}	NR	NR	6-15-50	1-2
1.98	NI2/NP10	2.06	31	MB46136	C12H4SO2N4F6Cl2	S	S	V	50	2+
1.99	HX10	1.88	-	pretilachlor	C17H26ClNO2	\mathbf{C}	-	-	-	-
2	NI11/NP200	1.78	3.14	diethatyl-ethyl	C16H22ClNO3	\mathbf{C}	NR	NR	6-15-50	1-2
2.03	HN(WB)1.3/HX7/HX4/ HX(WB)2/NI(WB)4/NP(W	2.02 /B)8	3.4	diclobutrazol	C15H19Cl2N3O	С	NR	NR	6-15-50	1-2
2.04		1.48	-	thiabendazole	C10H7N3S	\mathbf{C}	NR	-	6-15-50	-

APPENDIX I

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continue
--

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-17	with OV-17 Column	OV-101	OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl
2.08	HX19/HX(WB)2/NI(WB)5/ NP(WB)10	1.76	4	imazalil	C14H14Cl2N2O	С	NR	NR	6-15-50	-
2.1		1.58	2.46	triazamate	C13H22N4O3S	\mathbf{C}	NR	NR	6-15-50	1-2-
2.11	FP7	-	-	jodfenphos	C8H8Cl2IO3PS	\mathbf{C}	-	-	-	-
2.11	NP200	-	-	sulfanilamide	C6H8O2N2S	NR	NR	NR	6-15-50	1-2-
2.12		1.7	-	napropamide	C17H20NO2	\mathbf{C}	-	-	-	-
2.13	FP5/FP(WB)2.9	1.8	2.34	profenofos	C11H15BrClO3PS	\mathbf{C}	P	P	50	3
2.16	HX9/NI2/NP350	2	4	oxyfluorfen	C15H11ClF3NO4	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
2.19	NI2	1.9	2.46	TDE, o,p'-	C14H10Cl4	-	\mathbf{C}	\mathbf{C}	6	1
2.2	HX5	1.61	3.04	ovex	C12H8Cl2O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
2.28	FP(WB)2.4/NI10	1.4	3.33	methidathion	C6H11N2O4PS3	\mathbf{C}	S	P #	50	3
2.29	NI2	2.13	2.22	endrin	C12H8Cl6O	\mathbf{C}	С#	С#	15	2
2.31	HX40	2.3	2.36	fluazifop butyl ester	C19H20F3NO4	\mathbf{C}	\mathbf{C}	V	15	3
2.33	HX24/HX(WB)5/NP(WB)6	1.97	-	flusilazole	C16H15F2N3Si	\mathbf{C}	-	-	-	-
2.34	NI2/NP50	2.21	-	chlorfenapyr (prop)	C15H11BrClF3N2O	P	-	S	50	2
2.38	NI22/NP(WB)100	2.19	4.2	binapacryl	C15H18N2O6	\mathbf{C}	P	P	15	-
2.38	HX2/NI5	2.75	1.67	chlordecone	C10H8Cl10O5	-	S#	P#	15+50	1-2
2.39	FP7	1.5	6.7	disulfoton sulfone	C8H19O4PS3	\mathbf{C}	NR	-	6-15-50	-
2.4	HN(WB)5	2.14	5	PPG-947, methylated*	C18H13ClF3NO7	-	-	-	-	-
2.4	HN(WB)4/HX(WB)6.5/ NI(WB)3/NP(WB)210	2.15	5	PPG-847, methylated	C15H9ClF3NO3	-	-	-	-	-
2.41	NI5/NP38	1.53	6.5	CGA 94689A	C15H21NO5	V	NR	NR	6-15-50	1-2
2.41	FS(WB)90/NI(WB)80/ NP(WB)80	1.28	-	hexythiazox	C17H21CIN2O2S	-	S #	NR	50	2+
2.41	FP10/NP3	1.66	3.7	fenamiphos	C13H22NO3PS	\mathbf{C}	NR	NR	6-15-50	1-2
2.41	NI15	2.33	2.9	chloropropylate	C17H16Cl2O3	P	\mathbf{C}	\mathbf{C}	15+50	3
2.42	NI25	2.23	2.01	Perthane	C18H2OCl2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
2.44	HX60	-	-	imazamethabenz methyl ester*	C16H20N2O3	C	-	-	-	-
2.45	NI10/NP75	1.54	6.6	CGA 94689B	C15H21NO5	S	NR	NR	6-15-50	1-2
2.45		1.94	-	flamprop-methyl	C17H15CIFNO3	\mathbf{C}	-	-	-	-
2.51	FP3	-	-	mephosfolan	C8H16NO3PS2	\mathbf{C}	-	-	-	-
2.55	HN(WB)13/HX(WB)99/ NI(WB)35/NP(WB)290	1.35	2.27	3-tert-butyl-5-chloro-6-hydroxy= methyluracil	C9H13ClN2O3	-	NR	NR	6-15-50	1-2

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	-		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl
2.55	HN(WB)1.2/NP(WB)53	1.41	-	IN-T3936	C10H15N3O4	S	NR	NR	6-15-50	1-2-3
2.58	FP5	2.24	-	chlorthiophos*	C11H15Cl2O3PS2	C	С	\mathbf{C}	6	2
2.6	HX10/HX(WB)4/NI(WB)21/ NP75/NP(WB)6	/ 1.9	7.2	myclobutanil	C15H17CIN4	С	NR	NR	6-15-50	1-2-
2.6	NP(WB)300	2	3.7	bupirimate	C13H24N4SO3	\mathbf{C}	-	-	-	-
2.61	NI2	2.52	3.33	nonachlor, cis-	C10H5Cl9	\mathbf{C}	\mathbf{C}	C	6	1
2.61	NI15	2.31	3.26 -	chlorobenzilate	C16H14Cl2O3	\mathbf{C}	С#	P#	15+50	3
2.62		3.38	-	2,4,5-T ethylhexyl ester	C16H21Cl3O3	-	-	-	-	-
2.67	NP36	1.5	4.3	TCMTB	C9H6N2S3	\mathbf{C}	P	P	15	-
2.69		2.04	1.61	cyproconazole	C15H18ClN3O	\mathbf{C}	NR	NR	6-15-50	1-2-
2.69	FP5	-	-	phosfolan	C7H14NO3PS2	\mathbf{C}	-	-	-	-
2.7		2.95	2.84	pyrethrins*	C21H27O4	-	С	С	50	-
2.7	NI2	2.55	2.27	DDT, o,p'-	C14H9Cl5	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
2.71	NI3	2.03	3.8	nitrofen	C12H7Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
2.76	HX60	1.79	3.5	imazamethabenz methyl ester*	C16H20N2O3	\mathbf{C}	-	-	-	-
2.77	FP5	2.36	-	chlorthiophos*	C11H15Cl2O3PS2	C	С	С	6	2
2.77	HX3/NI2	2.21	3.9	endosulfan II	C9H6Cl6O3S	\mathbf{C}	\mathbf{C}	\mathbf{C}	15+50	2
2.8	NI5	2.64	2.33	tetrasul	C12H6Cl4S	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
2.81		2.46	-	flamprop-M-isopropyl	C19H19ClFNO3	\mathbf{C}	-	-	-	-
2.87	FP15	4.2	-	carbophenothion oxygen analog sulfoxide	C11H16ClO4PS2	-	-	-	-	-
2.87	NI2	2.41	3.8	TDE, p,p'-	C14H10Cl4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
2.88		3.03	2.74	ethephon	C2H6ClO3P	NR		-	6+15+50	1+2-
2.92	NP(WB)8	2.07	-	methoprotryne	C11H21N5OS	\mathbf{C}	-	-	-	-
2.96	NI1000/NP150	1.8	-	CGA 100255	C15H12NO5	S	-	-	-	-
2.99	FP10/HX11	2.22	4.1	chlorthiophos oxygen analog	C11H15Cl2O4PS	\mathbf{C}	NR	NR	6-15-50	1-2
3	NI120/NP70	2.4	4.3	imazethapyr ammonium salt methyl ester	C16H21N3O3	-	-	-	-	-
3.06	FP15	2.17	4.2	carbophenothion oxygen analog	C11H16ClO3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-
3.14	NI5	2.38	3.24	leptophos photoproduct	C13H11Cl2O2PS	\mathbf{C}	-	-	-	-
3.16	FP5	2.56	-	chlorthiophos*	C11H15Cl2O3PS2	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
3.17	HX7	2.43	-	etaconazole*	C14H15Cl2N3O2	\mathbf{C}	-	-	-	-

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-17	with OV-17 Column	OV-101		Name	Formula	302	303	304	Ethers	CH ₂ Cl
3.17		1.6	4.1	isoprothiolane	C12H18O4S2	C	-	-	-	-
3.36	FP4/FP(WB)2.3/NI8	2.56	3.93	ethion	C9H22O4P2S4	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
3.38	NI(WB)15/NP(WB)40	2	3.02	kresoxim-methyl	C18H19NO4	P	\mathbf{C}	\mathbf{C}	15+50	3
3.5	NI150	-	-	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
3.5	FP3	2.79	-	sulprofos	C12H19O2PS3	\mathbf{C}	-	-	-	-
3.5	NI2	3.13	3.6	DDT, p,p'-	C14H9Cl5	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	1
3.6	FP(WB)29	2.78	-	sulprofos sulfoxide*	C12H19O3PS3	\mathbf{C}	-	-	-	-
3.6	FP100	2.8	-	fensulfothion sulfone	C11H17O5PS2	\mathbf{C}	NR	-	6-15-50	-
3.7		2.9	-	1,1'-(2,2-dichloroethylidene)bis(2-methoxybenzene)	C16H16Cl2O2	-	R	-	-	-
3.7	FP8	2.94	4.2	carbophenothion	C11H16ClO2PS3	\mathbf{C}	\mathbf{C}	P	6	2
3.7	NI(WB)5	3.1	-	fenhexamid	C14H17Cl2NO2	NR	NR	NR	6-15-50	1-2
3.8	FP6	1.99	-	fensulfothion oxygen analog sulfone	C11H17O7PS2	-	-	-	-	-
3.8	FP6/FP(WB)7	2.4	-	fensulfothion	C11H17O4PS2	\mathbf{C}	NR	NR	6-15-50	1-2
3.9	NI150	4	-	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
3.9	NP500/NP(WB)8	1.59	-	tricyclazole	C9H7N3S	\mathbf{C}	-	-	-	-
3.9	NI6	2.81	7.5	Prolan	C15H13Cl2NO2	P	S	S	15	2
3.93		2.31	15	desisopropyl iprodione	C10H6Cl2N3O3	P		-	50	1-2
4	HX9	3.21	5.6	propiconazole*	C15H17Cl2N3O2	\mathbf{C}	NR	NR	6-15-50	1-2
4	FP20	5.4	-	carbophenothion sulfoxide	C11H16ClO3PS3	-	-	-	-	-
4	HX6/NI6	2.83	8.3	endosulfan sulfate	C9H6Cl6O4S	\mathbf{C}	\mathbf{C}	С	50	2
4.1	FP(WB)8	2.29	-	fenthion oxygen analog sulfone*	C10H15O6PS2	-	-	-	-	-
4.1	NI20/NP100	2.96	11.5	CL 202,347	C13H19N3O5	-	-	-	-	-
4.2	HN(WB)2/HX(WB)13/ NI(WB)18/NP(WB)85	2.51	4	pyrithiobac-sodium methyl ester	C14H13ClN2O4	-	-	-	-	-
4.2	HX(WB)3	3.38	-	tebuconazole	C16H22ClN3O	\mathbf{C}	-	-	-	-
4.2	NI200/NP50	4	15	KWG 1342	C14H18ClN3O3	-	-	-	-	-
4.2	NI10	2.97	3.7	methoxychlor olefin	C16H14Cl2O2	\mathbf{C}	\mathbf{C}	С	6	2
4.3	NI2600	3.8	4.8	propargite	C19H26O4S	\mathbf{C}	\mathbf{C}	-	15	2
4.4	NI150	4.3	6.9	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
4.4	FP(WB)12	2.26	-	famphur oxygen analog	C10H16NO6PS	\mathbf{C}	-	-	-	
4.4	NI5	3.06	7.5	Bulan	C16H15Cl2NO2	С	P	P	15	9

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c	,	Molecular			Recove	ries	
OV-17	with OV-17 Column	OV-101		Name	Formula	302	303	304	Ethers	CH ₂ C
4.5	NI100	6.1	1.48	tralkoxydim*	C20H27NO3	\mathbf{V}	NR	NR	50	1-2-
4.5	HX5/HX(WB)20	4.9	3.8	bifenthrin	C23H22ClF3O2	\mathbf{V}	С	-	6+15	2
4.5		2.43	-	benodanil	C13H10INO	\mathbf{C}	-	-	-	-
4.5		3.06	5.1	butyl benzyl phthalate	C19H20O4	-	\mathbf{C}	P	15+50	-
4.6	HN(WB)100/HX(WB)14/ NI(WB)85/NP(WB)210	2.87	-	vinclozolin metabolite F	C11H13Cl2NO4	R	NR	NR	6-15-50	1-2-
4.6		3.1	8.2	cyanofenphos	C15H14NO2PS	\mathbf{C}	-	-	-	-
4.67	NI(WB)20	3.26	5.8	clodinafop-propargyl	C17H13ClFNO4	\mathbf{V}	V	-	50	3
4.7	HX10	3.57	4.9	diclofop-methyl	C16H14Cl2O4	\mathbf{C}	С	\mathbf{C}	15	2
4.7	FP20	2.39	-	fenthion sulfone	C10H15O5PS2	\mathbf{C}	NR	NR	6-15-50	1-2
4.8	NI150	4.8	7.7	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	2
4.8	HX4	3.36	7.3	nuarimol	C17H12ClFN2O	\mathbf{C}	NR	C#	50	1-2
4.9	HX(WB)3	3.38	1.41	desmethyl norflurazon	C11H7ClF3N3O	V	NR	NR	6-15-50	1-2
5	NP14	2.5	14	oxadixyl	C14H18N2O4	\mathbf{C}	NR	NR	6-15-50	1-2
5	NI9	3.3	4.5	methoxychlor, o, p'-	C16H15Cl3O2	-	C	-	6	
5	FP5	2.49	-	fensulfothion oxygen analog	C11H17O5PS	\mathbf{C}	NR	-	6-15-50	
5	FP50/FP(WB)7	2.65	14	famphur	C10H16NO5PS2	\mathbf{C}	NR	-	6-15-50	
5.01	NP(WB)10	4.5	-	norflurazon	C12H9ClF3N3O	V	NR	NR	6-15-50	-
5.2	HX20/NI35/NP200	-	-	iprodione*	C13H13Cl2N3O3	\mathbf{C}	S#	NR	50	1-2
5.2	FP5/FP(WB)5	2.62	-	triazophos	C12H16N3O3PS	\mathbf{C}	-	-	-	-
5.3		5.4	-	carbosulfan	C20H32N2O3S	P	-	-	-	-
5.3	FP(WB)8	2.87	6.3	edifenphos	C14H15O2PS2	\mathbf{C}	-	-	-	-
5.4	HX51	2.62	18.6	ofurace	C14H16NO3Cl	\mathbf{C}	-	-	-	-
5.4	NI5	3.11	-	captafol	C10H9Cl4NO2S	\mathbf{C}	P	-	50	3
5.6	NI150	5.1	9.5	dinocap*	C18H24N2O6	\mathbf{C}	P	P	15	6
5.6	NI4	5.8	2.95	mirex	C10Cl12	P	C	P	6]
5.7	NI13	4.8	7	fenpropathrin	C22H23NO3	-	V#	V	15	2
6	NI8	4.3	8.4	benzoylprop-ethyl	C18H17Cl2NO3	P	NR	NR	6-15-50	1-2
6.1	NI200	12	8.9	CGA 205374	C16H11N3O2Cl2	-	NR	NR	6-15-50	1-2
6.1		6.4	4.5	bis(2-ethylhexyl) phthalate	C24H38O4	-	С	C	15+50	-
6.2		17	-	deltamethrin, trans-*	C22H19Br2NO3	-	P#	NR	15	2
6.2	FP(WB)12	3.8	-	phosalone oxygen analog	C12H15ClNO5PS	\mathbf{C}	-	-	-	-

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recover	ries	
OV-17	with OV-17 Column	OV-101	OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
6.3	HX20/NI35/NP200	4.2	18	iprodione*	C13H13Cl2N3O3	С	S#	NR	50	1-2-3
6.3	NI7	3.8	24	nitralin	C13H19N3O6S	\mathbf{C}	P	P	50	3
6.3	NI(WB)20	4.8	6.6	cloquintocet-mexyl	C18H22ClNO3	V	NR	-	6-15-50	1-2-3
6.5		5.4	4.8 -	phenothrin*	C23H26O3	-	-	-	-	-
6.5		4.2	7.6	leptophos oxygen analog	C13H10BrCl2O3P	\mathbf{C}	-	-	-	-
6.8		4.8	9.7	piperophos	C14H28NO3PS2	\mathbf{C}	-	-	-	-
6.9	FP25/HX17	4.7	10.3	chlorthiophos sulfoxide	C11H15Cl2O4PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
6.9	FP50/NI9	4.5	10.6	EPN	C14H14NO4PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2
7.1	FP150	3.1	14.8	phosmet oxygen analog*	C11H12NO5PS	-	NR	NR	6-15-50	-
7.1	FP(WB)24	3.8	-	carbophenothion oxygen analog sulfone	C11H16ClO5PS2	-	-	-	-	-
7.2		4.5	8.5	tetramethrin*	C19H25NO4	\mathbf{C}	NR	NR	6-15-50	1-2-3
7.2	NI8	4.7	8.6	tetrasul sulfoxide	C12H6Cl4OS	-	-	-	-	-
7.2	NI7	4.7	7.2	methoxychlor, p, p'-	C16H15Cl3O2	\mathbf{C}	C	\mathbf{C}	6	2
7.3	NP50	5	-	fenoxycarb	C17H19NO4	\mathbf{C}	-	-	-	-
7.5	FS(WB)1500/NI(WB)0.1/ NP(WB)73	3.3	-	3-desmethyl sulfentrazone	C10H8Cl2F2N4O3S	-	NR	NR	6-15-50	1-2-3
7.5	NP375	3.6	37.1	myclobutanil alcohol metabolite	C15H17ClN40	S	NR	NR	6-15-50	1-2-3
7.5	HX80	5.3	-	iprodione metabolite isomer	C13H13Cl2N3O3	\mathbf{C}	S	-	50	-
8	HX30	7.4	-	lambda-cyhalothrin	C23H19ClF3NO3	\mathbf{C}	-	-	-	-
8	HX(WB)50	2.67	13	pyrazon	C10H8ClN3O	\mathbf{C}	NR	NR	6-15-50	1-2-3
8.1	FP(WB)28/NP45	5.2	-	fenamiphos sulfoxide	C13H22N04PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
8.3	NI5	5.2	-	tetradifon	C12H6Cl4O2S	\mathbf{C}	C	\mathbf{C}	15	2
8.4	FP(WB)20/NP60	4.5	-	fenamiphos sulfone	C13H22NO5PS	\mathbf{C}	NR	NR	6-15-50	1-2-3
8.4	FP50/NI78	4	14.9	phosmet	C11H12O4NPS2	\mathbf{C}	NR	-	6-15-50	3
8.5	FP(WB)15/NI12	5.8	7.7	leptophos	C13H10BrCl2O2PS	\mathbf{C}	\mathbf{C}	\mathbf{C}	6	2
8.5	NI5	4.4	15.5	photodieldrin	C12H8Cl6O	-	C	\mathbf{C}	15+50	2
8.7		4.2	14	pyridaphenthion	C14H17O4N2SP	C	-	-	-	-
8.8		5	14.9	bifenox	C12H9Cl2NO5	\mathbf{C}	\mathbf{C}	P	15+50	2+3
8.9	NI25/NP100	10.4	12.8	acrinathrin	C26H21F6NO5	V	V	V#	15	2
9.1	FP100/HX22	5.3	18.8	chlorthiophos sulfone	C11H15Cl2O5PS2	\mathbf{C}	\mathbf{C}	-	50	3
9.1	NI12	5.5	5.5	phosalone	C12H15ClNO4PS2	\mathbf{C}	C	\mathbf{C}	50	2+3

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c	Detector Responses	RRT/c	RRT/c		Molecular			Recove	ries	
OV-17	with OV-17 Column		OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂
9.2	FP30	5.1	-	carbophenothion sulfone	C11H16ClO4PS3	\mathbf{C}	\mathbf{C}	P	6	1
9.4	HN(WB)4	3.28	-	oxycarboxin	C12H13NO4S	R	-	-	-	-
9.8	NP165	5.9	-	clofentezine	C14H8Cl2N4	R	S	-	15	2
10.1		6.6	-	fenarimol	C17H12Cl2N2O	\mathbf{C}	P#	C#	50	3
10.1	FP(WB)42	3.7	-	azinphos-methyl oxygen analog	C10H12N3O4PS	\mathbf{C}	-	-	-	-
10.5		8.1	11.3	fenoxaprop ethyl ester	C18H16NO5Cl	S	V	V	50	3
10.6	FP40/FP(WB)28/NI20/NP40	5.1	-	sulprofos oxygen analog sulfone	C12H19O5PS2	\mathbf{C}	-	-	-	-
11		7	-	tebufenozide	C22H28N2O2	-	NR	NR	6-15-50	1-2-3
11.3	NP(WB)120	4.7	53	dithianon	C14H4O2N2S2	NR	-	-	-	-
11.4		7	-	CGA 118244	C15H13Cl2N3O3	\mathbf{V}	NR	NR	6-15-50	1-2-3
11.5	NI1000/NP1000	6.5	-	myclobutanil dihydroxy metabolite	C15H17N4O2Cl	NR	NR	NR	6-15-50	1-2-3
11.7	FP(WB)29	6.1	-	sulprofos sulfoxide*	C12H19O3PS3	\mathbf{C}	-	-	-	-
11.8	NP(WB)200	9.4	-	bitertanol*	C20H23N3O2	\mathbf{C}	-	-	-	-
11.8		5.2	-	azinphos-methyl	C10H12N3O3PS2	\mathbf{C}	NR	NR	6-15-50	1-2-3
12.5	NP(WB)200	9.7	-	bitertanol*	C20H23N3O2	\mathbf{C}	-	-	-	-
12.6	NI70	7.9	10.8	HOE-030291	C17H16Cl2O5	-	-	-	-	-
13	FP25	8.1	-	pyrazophos	C14H20N3O5PS	\mathbf{C}	-	-	-	-
13.1	FP(WB)26	7.2	-	sulprofos sulfone	C12H19O4PS3	\mathbf{C}	-	-	-	-
13.8		9.4	11.1	permethrin, cis-	C21H20Cl2O3	\mathbf{C}	V#	\mathbf{C}	6+15	2
14.3	FP25/FP(WB)31	6.5	-	dialifor	C14H17ClNO4PS2	\mathbf{C}	\mathbf{C}	P	15	2
14.8	FP(WB)26/NI20	6.9	-	azinphos-ethyl	C12H16N3O3PS2	\mathbf{C}	P	S	50	3
15		11.5	10.9	phenothrin*	C23H26O3	-	-	-	-	-
15		10.2	13	permethrin, trans-	C21H20Cl2O3	\mathbf{C}	V#	\mathbf{C}	6+15	2
15.4		10.4	-	prochloraz	C15H16Cl3N3O2	\mathbf{C}	-	-	-	-
16	FP75/NI50/NP40	8	45	coumaphos oxygen analog	C14H16ClO6P	\mathbf{C}	NR	NR	6-15-50	1-2-3
16	NI400	13	13	hexachlorophene	C13H6Cl6O2	-	NR	NR	6-15-50	-
18	FP50/FP(WB)26/NI38/NP34	9	40	coumaphos	C14H16ClO5PS	\mathbf{C}	NR	С#	6-15-50	3
20		29	-	deltamethrin, trans-*	C22H19Br2NO3	-	P#	NR	15	2
20.2	FP100	9.5	-	bensulide	C14H24NO4PS3	\mathbf{C}	P	\mathbf{C}	50	3
21		17.1	-	deltamethrin*	C22H19Br2NO3	\mathbf{C}	S#	P	15	2
21.4		14.7	36.9	flucythrinate*	C26H23F2NO4	\mathbf{C}	С	-	15	2+3
23		14.1	33	cypermethrin*	C22H19Cl2NO3	\mathbf{C}	С	\mathbf{C}	15	2

Appendix I: PESTDATA Chemicals in Order by OV-17 Relative Retention Time (continued)

RRT/c Detector Responses		RRT/c RRT/c		Molecular	Recoveries						
OV-17	with OV-17 Column	OV-101	OV-225	Name	Formula	302	303	304	Ethers	CH ₂ Cl ₂	
24		16.1	42	flucythrinate*	C26H23F2NO4	\mathbf{C}	С	-	15	2+3	
25		15.1	36	cypermethrin*	C22H19Cl2NO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2	
25		13.6	-	quizalofop ethyl ester	C19H17ClN2O4	\mathbf{C}	-	-	-	-	
35		-	56	fluvalinate*	C26H22ClF3N2O3	\mathbf{C}	\mathbf{C}	-	15	2	
35		27	-	deltamethrin*	C22H19Br2NO3	\mathbf{C}	S#	P	15	2	
35		20.3	44	fenvalerate*	C25H22CINO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2	
38		25	59	fluvalinate*	C26H22ClF3N2O3	\mathbf{C}	\mathbf{C}	-	15	2	
38		31	19.7	deltamethrin, trans-*	C22H19Br2NO3	-	P#	NR	15	2	
38		29	19.9	deltamethrin*	C22H19Br2NO3	\mathbf{C}	S#	P	15	2	
40		22.5	51	fenvalerate*	C25H22CINO3	\mathbf{C}	\mathbf{C}	\mathbf{C}	15	2	
43	NI200/NP500	23	57	PB-7, methylated	C20H25CIN2O3S	-	-	-	-	-	
44		27	64	tralomethrin	C22H19Br4NO3	\mathbf{C}	V	S	15	2	
46	NI250/NP750	25	87	PB- 9	C19H25ClN2O2S	\mathbf{V}	NR	NR	6-15-50	1-2-3	