

Table 1: Results and z-Scores for Azoxystrobin, Carbendazim and Iprodione in Wine Test Material

laboratory number	analyte											
	azoxystrobin assigned value 74.1 µg/kg				carbendazim assigned value 159 µg/kg				iprodione assigned value 311 µg/kg			
	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score
001	#				#				380	98	30	1.2
002	38	90	10	-2.2	#				303	110	10	-0.1
003	53.4	71	10	-1.3	104.2		10	-1.6	224.4	74.6	10	-1.5
004	♣ 90	137	10	1.0	150	101	10	-0.3	310	127	10	0.0
005	85			0.7	#				405			1.6
006	#				210	125	25	1.5	#			
007	84	70	10	0.6	94	79	10	-1.9	228	73	10	-1.4
008	88	90	27.02	0.9	#				249	85	42.20	-1.0
009	74	95	10	0.0	176	87	10	0.5	176	101	20	-2.3
010	138	94.4	5.0	3.9	#				501	105.7	5.1	3.2
011	66.2	116.3	5	-0.5	#				446.3	115.8	5	2.3
012	91		10	1.0	160		10	0.0	224		20	-1.5
013	67		10	-0.4	0		10	-4.7	321		10	0.2
014	50	96	5	-1.5	210	91	10	1.5	320	103	30	0.2
015	60	99	10	-0.9	115	84	10	-1.3	317	66	10	0.1
016	53			-1.3	89			-2.1	#			
017	#				#				320.5	80	10	0.2
018	72.5	96	10	-0.1	144	76	10	-0.4	331	100	10	0.3
019	70		10	-0.3	#				366		10	0.9
020	82	100	50	0.5	#				378	100	10	1.1
021	90	79	10	1.0	190	80	10	0.9	280	95	10	-0.5
022	#				#				216	61	10	-1.6
023	96	171	10	1.3	140	69	10	-0.6	360	116	10	0.8
024	79	95	5	0.3	143	99	5	-0.5	295	93	10	-0.3
025	74	98	10	0.0	37	70	10	-3.6	649	100	10	5.7
026	63	95	1	-0.7	166	70	1	0.2	246	120	1	-1.1
027	73.7	106	2	0.0	116.7	97	2	-1.3	302.4	99	2	-0.1
028	35	60	10	-2.4	#				206	88	10	-1.8

LoQ = limit of quantification

= pesticide not analysed for

unsatisfactory z-scores are highlighted in **bold**

Participants' comments: ♣ = Iprodion+IprodionMET=330?g/kg

Table 1 (continued): Results and z-Scores for Azoxystrobin, Carbendazim and Iprodione in Wine Test Material

laboratory number	analyte											
	azoxystrobin assigned value 74.1 µg/kg				carbendazim assigned value 159 µg/kg				iprodione assigned value 311 µg/kg			
	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score
029	70	88	10	-0.3	200	100	10	1.2	230	81	10	-1.4
030	74	106		0.0	155	93		-0.1	264	89		-0.8
031	74.98	79.62	10	0.1	39.05	22.26	10	-3.6	#			
032	68	85	10	-0.4	170	90	10	0.3	322	91	10	0.2
033	♣ 170	97	10	5.9	NQ				309	96	10	0.0
034	0			-4.5	#				322.0	31.4	16.7	0.2
035	81	99	10	0.4	200	100	10	1.2	346	102	10	0.6
036	50	98	10	-1.5	150		10	-0.3	301	95	10	-0.2
037	91	100	10	1.0	199	105	10	1.2	#			
038	73.2		10	-0.1	0		10	-4.7	#			
039	#				#				0	101	40	-5.2
040	87	109	20	0.8	282	109	10	3.7	243	100	10	-1.1
041	94	100	10	1.2	147	85	10	-0.4	438	89	10	2.2
042	60	90	10	-0.9	120	90	10	-1.2	205	90	10	-1.8
043	68	104	5	-0.4	#				376	108	5	1.1

LoQ = limit of quantification

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unsatisfactory z-scores are highlighted in **bold**

Participants' comments: ♣ = only by screening of GC but we find Carbendazim by LC; only expressed as metalaxyl;

Table 2: Results and z-Scores for Metalaxyl and Metalaxyl-M (sum), Propiconazole and Pyrimethanil in Wine Test Material

laboratory number	analyte											
	metalaxyl and metalaxyl-M (sum) assigned value 134 µg/kg				propiconazole assigned value 261 µg/kg				pyrimethanil assigned value 118 µg/kg			
	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score
001	#				#				#			
002	163	120	10	1.0	325	110	10	1.3	73	105	10	-1.7
003	132.4	81.7	10	-0.1	253.9	75.6	10	-0.1	127.0	80.7	10	0.4
004	120	94	10	-0.5	270	110	10	0.2	90	101	10	-1.1
005	141			0.2	249			-0.2	0			-4.5
006	180	142	10	1.6	#				150	130	100	1.2
007	131	72	10	-0.1	235	82	10	-0.5	93	76	10	-1.0
008	157	71	6.16	0.8	307	71	15.75	0.9	#			
009	147	93	10	0.4	302	102	10	0.8	140	96	10	0.9
010	161	91.8	5.1	0.9	524	109.2	5.1	5.2	143	111.8	5.2	1.0
011	129.95	133.6	5	-0.1	254.5	116.8	5	-0.1	91.25	112.2	5	-1.0
012	140		10	0.2	267		10	0.1	113		10	-0.2
013	133		10	0.0	255		10	-0.1	123		10	0.2
014	0	80	20	-4.6	240	109	20	-0.4	130	98	5	0.5
015	109	75		-0.9	226	92	10	-0.7	106	84	10	-0.5
016	112			-0.8	207			-1.1	121			0.1
017	112.5	91	20	-0.7	215.5	90	50	-0.9	#			
018	131	92	10	-0.1	292	107	10	0.6	128	93	10	0.4
019	141		10	0.2	NQ				142		10	0.9
020	176	100	10	1.4	280	100	10	0.4	150	100	10	1.2
021	#				#				140	83	10	0.9
022	♥ 350	197	10	7.4	#				NQ			
023	140	117	10	0.2	290	112	10	0.6	120	103	10	0.1
024	130	97	5	-0.1	233	99	5	-0.5	112	97	5	-0.2
025	123	74	10	-0.4	190	69	10	-1.4	72	49	10	-1.8
026	♦ 125	94	1	-0.3	256	101	5	-0.1	121	94	2	0.1
027	150.1	98	2	0.5	194.1	109	5	-1.3	108.7	118	5	-0.3
028	81	81	10	-1.8	175	64	10	-1.7	66	53	10	-2.0

LoQ = limit of quantification

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unsatisfactory z-scores are highlighted in **bold**

Participants' comments: ♥ = Scan data identified the presence of pyrimethanil – we do not quantitate

♦ = metalaxyl result without metalaxyl-M

Table 2 (continued): Results and z-Scores for Metalaxyl and Metalaxyl-M (sum), Propiconazole and Pyrimethanil in Wine Test Material

laboratory number	analyte											
	metalaxyl and metalaxyl-M (sum) assigned value 134 µg/kg				propiconazole assigned value 261 µg/kg				pyrimethanil assigned value 118 µg/kg			
	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score	result µg/kg	recovery %	LoQ µg/kg	z-score
029	130	102	10	-0.1	250	102	10	-0.2	110	103	10	-0.3
030	132	102		-0.1	217	98		-0.9	136	105		0.7
031	198	155	10	2.2	1514	282	10	24.6	#			
032	112	88	10	-0.8	269	87	10	0.2	113	93	10	-0.2
033	♣ 75	95	10	-2.0	20	95	10	-4.7	85	97	10	-1.3
034	128.3	32.6	3.3	-0.2	707.2			8.7	116.6	32.3	3.3	0.0
035	166	100	10	1.1	292	101	10	0.6	132	103	10	0.6
036	106	97	10	-1.0	230	89	10	-0.6	105	99	10	-0.5
037	#				#				172	100	10	2.1
038	85.2		10	-1.7	160		10	-2.0	87.9		10	-1.2
039	#				#				#			
040	116	100	10	-0.6	220	100	10	-0.8	102	100	10	-0.6
041	157	90	10	0.8	297	87	10	0.7	151	105	10	1.3
042	100	90	10	-1.2	150	90	10	-2.2	110	90	10	-0.3
043	312	64	5	6.1	222			-0.8	101			-0.6

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Participants' comments: ♣ = only by screening of GC but we find Carbendazime by LC; only expressed as metalaxyl;

Table 3: Assigned Values and Target Standard Deviations

analyte	assigned value, µg/kg				target standard deviation, µg/kg	
	data points	robust mean	robust sd	uncertainty	derived from	σ_p
	n	\hat{X}	$\hat{\sigma}$	u		
azoxystrobin	27	74.1	16.8	3.23	Horwitz*	16.3
carbendazim	18	159	46.9	11.0	Horwitz*	33.5
iprodione	28	311	87.1	16.5	Horwitz*	59.2
metalaxyl and metalaxyl-M (sum)	22	134	25.5	5.44	Horwitz*	29.1
propiconazole	24	261	43.0	8.77	Horwitz*	51.0
pyrimethanil	25	118	24.2	4.84	Horwitz*	25.9

* see page 7 for appropriate form of the Horwitz equation

Table 4: Number and Percentage of Satisfactory z-Scores

analyte	number of satisfactory scores $ z \leq 2$	total number of scores	satisfactory %
azoxystrobin	33	38	87
carbendazim	22	28	79
iprodione	32	38	84
metalaxyl and metalaxyl-M (sum)	35	39	90
propiconazole	31	36	86
pyrimethanil	35	37	95

Table 5: Number and Percentage of Participants Correctly Identifying and Obtaining Satisfactory z-Scores for all Pesticides Present >30 µg/kg

criteria	number of satisfactory participants	total number of participants	satisfactory %
correctly identified all six pesticides	21	43	49
correctly identified and obtained satisfactory z-scores for all six pesticides	15	43	35