

PYRIMETHANIL (226)

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EXPLANATION

Pyrimethanil, an anilinopyrimidine fungicide was evaluated for the first time by the 2007 JMPR, where an ADI of 0–0.2 mg/kg bw was established and an ARfD was deemed unnecessary. At this Meeting, maximum residue levels were recommended for a limited number of uses where GAP information was available.

The residue definitions for pyrimethanil are:

- For plant products (compliance with MRLs and dietary risk assessment)—*pyrimethanil*
- For milk (compliance with MRLs and dietary risk assessment)—sum of pyrimethanil and 2-anilino-4,6-dimethylpyrimidin-5-ol, expressed as pyrimethanil
- For livestock tissues, excluding poultry (compliance with MRLs and dietary risk assessment)—sum of pyrimethanil and 2-(4-hydroxyanilino)-4,6-dimethylpyrimidine, expressed as pyrimethanil

New GAP information, freezer storage stability studies and supervised residue trials on cane berries, bush berries and greenhouse cucumbers were provided to the current Meeting.

METHODS OF ANALYSIS

Residue trial samples from the EU were analysed using gas chromatography with mass selective detection (GC-MS) method DGM C05/98-0, which was previously evaluated by the JMPR in 2007. The North American trial samples were analysed using a similar method with minor adaptations (LC-MS/MS instead of GC-MS), in order to simplify the clean-up procedure (no hexane partition and no SPE purification step). In the case of cucumbers, an Evolute ABN SPE was used instead of a Silica SPE. The method has a demonstrated LOQ of 0.05 mg/kg.

Stability of pesticide residues in stored analytical samples

The storage stability data from the 2007 JMPR cover a diverse range of crops (apples, grapes, tomatoes, lettuce, carrots, dry peas, peaches, and plums) and demonstrated stability of pyrimethanil for up to 12 months. The samples from the submitted cane berry and bush berry supervised residue trial studies were stored for periods less than 12 months. Therefore, the current Meeting concluded that the available data is sufficient to cover the storage intervals from the berry crop field trials.

Although the stability of residues of pyrimethanil in cucumber is covered by the 12 month storage interval for the high-water content commodity group, as determined during the 2007 JMPR, the current Meeting noted that concurrent storage stability data provided with the cucumber supervised residue trials also demonstrated stability of pyrimethanil residues up to 4.5 months (the period for which the samples were stored) in greenhouse cucumbers.

The 2015 Meeting received freezer storage stability data investigating the stability of pyrimethanil in almond nutmeat and in wheat matrices.

Control samples of almond nutmeat were fortified at 0.50 mg/kg with pyrimethanil and stored in a freezer at –20 °C. Samples from Day 0 were analysed immediately after fortification, followed by time periods of 1, 3, 6 and 12-months. At each time period, a control, two freshly fortified controls, and two aged fortifications were analysed for residues of pyrimethanil.

Control samples of wheat forage, straw and grain were fortified at 0.50 mg/kg with pyrimethanil in glass jars and were stored in a freezer at –20 °C. Samples from day 0 were analysed immediately after fortification, followed by time periods of 1, 3, 6, 12, 18 and 24-months. At each time period, a control, two freshly fortified controls, and two aged fortifications were analysed for residues of pyrimethanil.

The GC-MS method DGM C05/98-0 was used to analyse residues of pyrimethanil in almond and wheat matrices.

Table 1 Stability of pyrimethanil residues in almond nutmeat spiked at 0.5 mg/kg and stored at -20 °C

Storage Interval (months)	Individual Stored Sample Residues (mg/kg)	Mean Stored Sample Residues (mg/kg)	Remaining (%)	Individual Procedural Recoveries (%)	Mean Procedural Recoveries (%)
0	0.45, 0.47	0.46	100	90.1, 94.0	92.1
1	0.44, 0.45	0.45	97.0	93.0, 81.3	87.2
3	0.44, 0.39	0.42	91.0	90.1, 89.6	89.9
6	0.44, 0.43	0.44	94.8	87.7, 86.5	87.1
12	0.41, 0.46	0.44	95.7	84.2, 90.4	87.3

Table 2 Stability of pyrimethanil residues in wheat straw, forage and grain spiked at 0.5 mg/kg and stored at -20 °C

Storage Interval (months)	Individual Stored Sample Residues (mg/kg)	Mean Stored Sample Residues (mg/kg)	Remaining (%)	Individual Procedural Recoveries (%)	Mean Procedural Recoveries (%)
Wheat straw					
0	0.50, 0.47	0.486	100	99.8, 94.4	97.1
1	0.33, 0.31	0.319	65.6	70.5, 70.6	70.6
3	0.35, 0.37	0.358	73.7	68.2, 69.6	68.9
6	0.42, 0.36	0.388	79.8	79.1, 83.3	81.2
12	0.36, 0.38	0.367	75.5	75.9, 80.1	78.0
18	0.46, 0.46	0.462	95.1	84.6, 93.8	89.2
24	0.31, 0.27	0.288	59.1	63.4, 64.7	64.1
Wheat forage					
0	0.38, 0.44	0.412	100	76.4, 88.5	82.5
1	0.40, 0.37	0.387	93.9	83.0, 83.4	83.2
3	0.44, 0.37	0.404	98.1	93.2, 95.4	94.3
6	0.42, 0.45	0.438	106.3	89.6, 87.2	88.4
12	0.42, 0.47	0.438	106.3	90.1, 107	98.6
18	0.44, 0.47	0.457	110.9	99.1, 101	100.1
24	0.41, 0.44	0.428	103.9	91.0, 90.5	90.8
Wheat grain					

0	0.40, 0.41	0.404	100	79.7, 82.0	80.9
1	0.30, 0.31	0.309	76.5	79.8, 84.1	82.0
3	0.35, 0.32	0.332	82.2	93.1, 98.9	96.0
6	0.34, 0.31	0.329	81.4	75.6, 71.3	73.5
12	0.38, 0.31	0.346	85.6	98.8, 85.0	91.9
18	0.39, 0.39	0.394	97.5	102, 106	104
24	0.33, 0.30	0.312	77.2	75.2, 93.6	84.4

USE PATTERNS

Crop (Remarks)	Country	Form.	Application				PHI, Days
			Method	Rate, kg ai/ha	Spray Conc. kg ai/hL	No	
Berries and other small fruits							
Blackberries, raspberries	Canada	400SC	Foliar	0.8	0.08	2	0
Raspberries	Poland	300SC	Foliar	0.75	0.075	2	3
Highbush blueberries	Canada	400SC	Foliar	0.8	0.08	2	0
Fruiting vegetables, cucurbits							
Greenhouse cucumbers	Greece, Italy, Spain	400 SC	Foliar	–	0.08	3	3

RESIDUES RESULTING FROM SUPERVISED TRIALS ON CROPS

The Meeting received new information on supervised field trials involving foliar applications of pyrimethanil to the following crops.

Crop	Field/Greenhouse	Treatment Type	Countries	Table
Raspberries	Field	foliar (spray)	USA, Germany	3, 4
Blackberries	Field	foliar (spray)	USA	3
Blueberries	Field	foliar (spray)	USA	5
Cucumbers	Greenhouse	foliar (spray)	USA, CAN	6
Cucumbers	Greenhouse	foliar (spray)	France, Italy, Spain, Greece	7

Berries and other small fruits

Results from supervised residue trials on cane berries (blackberries and raspberries), and on bush berries (blueberries) conducted in the USA and raspberries conducted in Germany were provided to the Meeting.

Cane berries (blackberries and raspberries)

Five supervised field trials were conducted in the USA (2007) on cane berries (two trials on raspberries and three trials on blackberries). The blackberries and raspberries analysed in this study were held in frozen storage for a maximum of 11.6 months prior to analysis using the adapted analytical method DGM C05/98-0 by LC/MS/MS. The reported LOQ was 0.05 mg/kg. Berry samples

fortified with 0.05–9 mg/kg pyrimethanil were within the acceptable range of 70–120%, with a relative standard deviation of less than 20%.

Table 3 Pyrimethanil residues in raspberries and blackberries from supervised trials in the USA, involving two foliar applications of pyrimethanil (400 SC formulation)

Location, year (variety)	Application						DALT, days	Pyrimethanil Residues (mg/kg)	Ref
	Form	kg ai/ha	kg ai/hL	Water, L/ha	no.	RTI, days			
Canada GAP	400 SC	0.80	0.08	1000	2	7–10	0		Report No. RAGMP0 79 Doc. No. M- 307677- 01-1
USA, Enigma, GA, 2007 Blackberry (Arapaho)	600 SC	0.80– 0.81	0.21– 0.23	377– 360	2	7	0	<u>1.86</u> (2.22, 1.50)	
USA, Arkansas, WI, 2007 Raspberry (Kilarney)	600 SC	0.77– 0.82	0.21	363– 385	2	7	0	<u>8.38</u> (8.46, 8.30)	
USA, Jefferson, OR, 2007 Raspberry (Meeker)	600 SC	0.79– 0.80	0.22	358– 365	2	7	0	<u>2.13</u> (2.47, 1.78)	
USA, Hillsboro, OR ^a , 2007 Blackberry (Katata)	600 SC	0.80	0.21– 0.24	337– 382	2	7	0	<u>2.62</u> (2.38, 2.87)	
							3	0.77 (0.70, 0.85)	
							5	0.25 (0.22, 0.27)	
							7	0.15 (0.16, 0.15)	
							10	0.10 (0.10, 0.09)	
USA, Hillsboro, OR ^a , 2007 Blackberry (Boysenberry)	600 SC	0.81	0.21– 0.24	345– 386	2	7	0	1.69 (1.63, 1.76)	

^a Both treatments were made on the same days, rendering the trials dependent.

Raspberries

Five supervised field trials were conducted in Germany (1999–2000) on raspberries.

The raspberries were held in frozen storage for a maximum of 259 days prior to analysis using the GC/MS Method DGM C05/98-0. The reported LOQ was 0.05 mg/kg. Raspberry samples fortified with 0.05–5 mg/kg pyrimethanil were within the acceptable range of 70–120%, with a relative standard deviation of less than 20%.

Table 4 Pyrimethanil residues in raspberries from supervised residue trials in Germany, involving three foliar applications of pyrimethanil (400 SC formulation)

Location, year (variety)	Application						DALT, days	Pyrimethanil Residues (mg/kg)	Ref
	Form	kg ai/ha	kg ai/hL	Water, L/ha	no.	RTI, days			
Poland GAP	300 SC	0.75	0.075	1000	3	7	3		Report No. ER99ECN 274
Germany, Neustadt- Geinsheim ^a , 1999 (Rumla)	400 SC	0.80	0.13	600	3	10	0	4.65	
							3	<u>3.02</u>	
							7	2.33	
							14	1.35	
							0	4.42	
							3	<u>2.4</u>	
							7	1.2	
14	0.69								
Germany,	400 SC	0.80	0.13	600	3	9–12	0	20.17 ^b	

Location, year (variety)	Application						DALT, days	Pyrimethanil Residues (mg/kg)	Ref
	Form	kg ai/ha	kg ai/hL	Water, L/ha	no.	RTI, days			
Lumpzig, 1999 (Wilamette)							3	<u>6.95</u>	Report No. DR 00EUN 674
							7	2.53	
							14	1.18	
Germany, Neustadt-Geinsheim, 2000 (Autumnbliss)	400 SC	0.80	0.13	600	3	10	0	5.14	
							1	5.02	
							3	<u>3.37</u>	
Germany, Vechta-Langförden, 2000 (Schönemann)	400 SC	0.80	0.13	600	3	13–15	0	3.92	
							1	1.04	
							3	<u>0.78</u>	

^a Last applications were made 25 days apart, rendering the trials independent

^b Application and sampling before the beginning of ripening (BBCH 79). It is not compatible with a DALT = 0 (no marketable fruit available). This value is then excluded.

Bush berries (highbush blueberries)

Eight supervised field trials were conducted in the USA (2007) on highbush blueberries. The highbush blueberries analysed in this study were held in frozen storage for a maximum of 11.4 months prior to analysis using the adapted analytical method DGM C05/98-0 by LC/MS/MS. The reported LOQ was 0.05 mg/kg. Blueberry samples fortified with 0.05–6 mg/kg pyrimethanil were within the acceptable range of 70–120%, with a relative standard deviation of less than 20%.

Table 5 Pyrimethanil residues in highbush blueberries from supervised residue trials in the USA, involving two foliar applications of pyrimethanil (600 SC formulation)

Location, year (variety)	Application						DALT, days	Pyrimethanil Residues (mg/kg)	Ref
	Form	kg ai/ha	kg ai/hL	Water, L/ha	no.	RTI, days			
Canada GAP	400 SC	0.80	0.080	1000	2	7–10	0		Report No. RAGMP03 7
USA, Hillsboro, OR, 2007 (Bluecrop)	600 SC	0.79–0.81	0.66–0.73	111–119	2	7	0	<u>2.11</u> (2.17, 2.04)	
USA, Fennville, MI, 2007 (Jersey)	600 SC	0.80	0.50–0.51	157–161	2	7	0	<u>1.89</u> (1.80, 1.97)	
USA, Hixton, WI, 2007 (Patriot)	600 SC	0.79–0.80	0.21	371–374	2	7	0	<u>2.14</u> (1.70–2.59)	
USA, Elizabethtown, NC, 2007 (Reka)	600 SC	0.79–0.81	0.51–0.54	146–158	2	7	0	<u>2.27</u> (2.37–2.16)	
USA, Covert, MI, 2007 (Jersey)	600 SC	0.80	0.14–0.16	495–580	2	7	0	<u>5.13</u> (5.76, 4.50)	
USA, Chula, GA, 2007 (Brightwell)	600 SC	0.79–0.80	0.21	378–382	2	7	0	<u>1.40</u> (1.44, 1.36)	
USA, Ochlocknee, GA, 2007 (Tifblue)	600 SC	0.80–0.82	0.16–0.17	466–508	2	7	0	1.08 (1.05, 1.12)	
							1	<u>1.12</u> (1.10, 1.15)	
							3	0.64 (0.63, 0.66)	
							7	0.32 (0.32, 0.32)	

							10	0.18 (0.14, 0.22)	
USA, New Tripoli, PA, 2007 (Bluecrop)	600 SC	0.79–0.81	0.17	462–472	2	7	0	<u>2.00</u> (1.92, 2.08)	

Fruiting vegetables, cucurbits

Greenhouse Cucumbers—North America

Five greenhouse trials were conducted in Canada and the USA (2010–2011) on cucumbers.

The cucumber samples analysed in this study were held in frozen storage for a maximum of 4.6 months prior to analysis using the adapted analytical method DGM C05/98-0 by LC/MS/MS. The reported LOQ was 0.05 mg/kg. With the exception of one recovery of 68%, cucumber samples fortified with 0.05–5 mg/kg pyrimethanil were within the acceptable range of 70–120%, with a relative standard deviation of less than 20%.

Table 6 Pyrimethanil residues in greenhouse cucumbers from supervised trials in the USA and Canada, involving three foliar applications of pyrimethanil (400 SC formulation)

Location, year (variety)	Application						DALT, days	Pyrimethanil Residues (mg/kg)	Ref
	Form	kg ai/ha	kg ai/hL	Water, L/ha	no.	RTI, days			
USA, Salisbury, MD, 2010 (Samir)	400 SC	0.80	0.07	1132	3	7	1	0.07 (0.07, 0.07)	Report No. AAC10-056R Doc. No. M-477841-01-1
USA, Raleigh NC, 2010 (Jawell F1)	400 SC	0.78–0.80	0.08	988–1016	3	7	1	0.38 (0.38, 0.38)	
USA, Citra FL, 2011 (Jawell F1)	400 SC	0.79–0.81	0.09	926–948	3	13–14	1	0.47 (0.44, 0.49)	
USA, Parlier CA, 2010 (Cumlaude)	400 SC	0.81–0.85	0.07	1133–1191	3	7	1	0.82 (0.83, 0.80)	
Canada, Harrow ON, 2010 (Camaro)	400 SC	0.79–0.80	0.04	1982–2008	3	7–8	0	0.46 (0.50, 0.42)	
							1	0.45 (0.48, 0.42)	
							5	0.33 (0.33, 0.33)	
							11	0.17 (0.16, 0.17)	
							14	0.14 (0.14, 0.14)	

Greenhouse Cucumbers—Southern Europe 1997–1998

Nine greenhouse trials were conducted in the EU (1997–1998) on cucumbers.

The cucumber samples analysed in this study were held in frozen storage for a maximum of 6 months prior to analysis using the validated GC/MS method DGM C05/98-0. The reported LOQ was 0.05 mg/kg. With the exception of one recovery of 65%, cucumber samples fortified with 0.05–0.50 mg/kg pyrimethanil were within the acceptable range of 70–120%, with a relative standard deviation of less than 20%.

Table 7 Pyrimethanil residues in protected cucumbers from supervised residue trials in Southern EU, in 1997–1998 involving three foliar applications of pyrimethanil (400 SC formulation)

Location, year(variety)	Application						DALT, days	Pyrimethanil Residues (mg/kg)	Ref
	Form	kg ai/ha	kg ai/hL	Water, L/ha	no.	RTI, days			
Southern EU GAP (Greece, Italy, Spain)	400 SC	0.80	0.08	1000	3	10–14	3		
Southern France, Ledenon, 1997 (Girola)	400 SC	0.80	0.08	1000	3	10–14	0 1 3 7	0.09 0.09 <u>0.12</u> 0.12	Report No. ER97ECS 261
Italy, Mantova, 1997 (Darina)	400 SC	0.80	0.08	1000	3	12	0 1 3 7	0.45 0.20 <u>0.16</u> 0.04	
Spain, Alboraya, 1997 (Potomac F1)	400 SC	0.80	0.08	1000	3	12–14	0 1 3 7	0.42 0.50 <u>0.32</u> 0.12	
Greece, Ionia, 1997 (Hitel F1 RS)	400 SC	0.80	0.08	1000	3	10–11	0 1 3 7	0.88 0.45 <u>0.24</u> 0.08	
Spain, Sueca, 1997 (Potomac)	400 SC	0.80	0.08	1000	3	11	0 1 3 7	1.02 0.60 <u>0.25</u> 0.18	
France, Bruges, 1998 (De Ruiter)	400 SC	0.80	0.08	1000	3	10	0 3	0.31 <u>0.37</u>	
Greece, Esovalta, 1998 (Babina)	400 SC	0.80	0.04	2000	3	8–10	0 3	0.50 <u>0.19</u>	
Italy, Molfetta, 1998 (Cetriolo di Polignano)	400 SC	0.80	0.05	1500	3	9–11	0 3	0.49 <u>0.29</u>	
Portugal, Torres Vedras, 1998 (Jazzer)	400 SC	0.80	0.08	1000	3	9–10	0 3	0.51 <u>0.10</u>	

APPRAISAL

Pyrimethanil, an anilinopyrimidine fungicide, was evaluated for the first time by the 2007 JMPR, where an ADI of 0–0.2 mg/kg bw was established and an ARfD was deemed unnecessary. It was listed by the Forty-sixth Session of the CCPR (2014) for the evaluation by the 2015 JMPR for additional MRLs. New GAP information, freezer storage stability studies and supervised residue trials on cane berries, bush berries and greenhouse cucumbers were provided to the current Meeting

Residue definitions are:

- For compliance with the MRL and for dietary intake estimation for plant commodities: pyrimethanil
- For compliance with the MRL and for dietary intake estimation for milk: sum of pyrimethanil and 2-anilino-4,6-dimethylpyrimidin-5-ol, expressed as pyrimethanil
- For compliance with the MRL and for dietary intake estimation for livestock tissues (excluding poultry): sum of pyrimethanil and 2-(4-hydroxyanilino)-4,6-dimethylpyrimidine, expressed as pyrimethanil

The residue is not fat-soluble.

Stability of pesticide residues in stored analytical samples

Based on the storage stability data submitted, the Meeting concluded that no significant dissipation of pyrimethanil residues was observed in almond nutmeat after 12 months of storage or in wheat straw, forage and grain after 24 months of storage.

Results of supervised residue trials on crops

The Meeting received new supervised trial data for foliar applications of pyrimethanil (SC formulations) on cane berries (blackberries and raspberries), bush berries (blueberries), and greenhouse cucumbers.

Berries and other small fruits

Results from supervised field trials on blackberries, raspberries, and blueberries conducted in North America were provided to the Meeting, including raspberry data from Germany.

Cane berries (blackberries and raspberries)

Results from supervised field trials on blackberries and raspberries conducted in the USA and trials on raspberries conducted in Germany were provided to the Meeting.

A total of four independent supervised trials were conducted in the USA on blackberries and raspberries according to the critical GAP of Canada for cane berries (blackberries and raspberries) which allows a maximum of 2 applications of 0.8 kg ai/ha/application, and a PHI of 0 day.

Residues of pyrimethanil matching the Canadian GAP were: 1.86, 2.13, 2.62 and 8.38 mg/kg.

A total of five independent supervised trials were conducted in Germany on raspberries according to the Poland critical GAP for raspberries which allows a maximum of 3 applications of 0.8 kg ai/ha/application, and a PHI of 3 days.

Residues of pyrimethanil in raspberries matching the Poland GAP were: 0.78; 2.40; 3.02; 3.37 and 6.95 mg/kg.

The Meeting agreed to use the data set according to the Canadian GAP and estimated a maximum residue level of 15 mg/kg and an STMR of 3.02 mg/kg from the German trials for cane berries.

Bushberries-Blueberry

Results from supervised field trials on highbush blueberries conducted in the USA were provided to the Meeting.

A total of eight independent supervised trials were conducted in the USA on highbush blueberries according to the critical GAP in Canada for bush berries which allows a maximum of 2 applications of 0.8 kg ai/ha/application, and a PHI of 0 day.

Residues of pyrimethanil in highbush blueberries conducted in North America matching the GAP were: 1.12, 1.40, 1.89, 2.00, 2.11, 2.14, 2.27, and 5.13 mg/kg.

The Meeting estimated a maximum residue level of 8 mg/kg and an STMR 2.06 mg/kg for pyrimethanil on blueberries.

Greenhouse cucumbers

Results from supervised field trials on greenhouse cucumbers conducted in North America and Southern Europe were provided to the Meeting.

In the absence of a North American GAP for greenhouse cucumbers, the Meeting did not consider the USA and Canada trials in estimating a maximum residue level.

A total of nine independent supervised trials were conducted in Southern Europe on greenhouse cucumbers according to the critical GAPs in Greece, Italy, and Spain which allow a maximum of 3 applications of 0.8 kg ai/hL/application, and a PHI of 3 days.

Residues of pyrimethanil in greenhouse cucumbers matching the Southern EU GAP were: 0.10; 0.12; 0.16; 0.19; 0.24; 0.25; 0.29; 0.32; and 0.37 mg/kg.

The Meeting estimated a maximum residue level of 0.70 mg/kg and an STMR of 0.24 mg/kg for residues of pyrimethanil in greenhouse cucumbers.

RECOMMENDATIONS

On the basis of the data from supervised trials the Meeting concluded that the residue levels listed in Annex 1 are suitable for establishing maximum residue levels and for IEDI assessment.

Definition of the residue for compliance with the MRL and for the estimation of dietary intake for plant commodities: *pyrimethanil*.

Definition of the residue for compliance with the MRL and for dietary intake estimation for milk: sum of pyrimethanil and 2-anilino-4,6-dimethylpyrimidin-5-ol, expressed as pyrimethanil.

Definition of the residue for compliance with the MRL and for dietary intake estimation for livestock tissues (excluding poultry): sum of pyrimethanil and 2-(4-hydroxyanilino)-4,6-dimethylpyrimidine, expressed as pyrimethanil.

The residue is not fat soluble.

CCN	Commodity	Recommended Maximum residue level (mg/kg)		STMR or STMR-P mg/kg	HR or HR-P mg/kg
		New	New		
FB 0264	Blackberries	15		3.0	
FB 0020	Blueberries	8		2.1	
VC 0424	Cucumbers	0.7		0.24	
FB 0272	Raspberries	15		3.0	

DIETARY RISK ASSESSMENT

Long-term intake

The International Estimated Daily Intakes of Pyrimethanil for the GEMS/Food 17 cluster diets, based on estimated STMRs were 0% of the maximum ADI of 0.2 mg/kg bw. The Meeting concluded that the long-term intake of residues of pyrimethanil from uses considered by the current Meeting is unlikely to contribute to the overall intake and will not present a public health concern.

Short-term intake

The 2007 JMPR determined that no ARfD was considered necessary. Therefore the short-term intake of pyrimethanil residues from uses considered by the current Meeting is unlikely to present a public health concern.

REFERENCES

Code	Author(s)	Year	Title, Institute, Report reference
03RAP1X001	Tauber, R	2005	Frozen storage stability of Pyrimethanil and its metabolite AE C621312 in wheat forage, straw, and grain. Enviro-Test Laboratories, Ontario, Canada, Bayer CropScience Report No.: 03RAP1X001, Date 2005-11-15. GLP, unpublished M-264524-02-1
RAP1Y009	Tauber, R	2005	Frozen storage stability (12 months) of Pyrimethanil (AE B100309) in

Pyrimethanil

Code	Author(s)	Year	Title, Institute, Report reference
RAGMP079	Dallstream, KA & Fischer, DR	2008	almond nut meat using GC/MS. Enviro-Test Laboratories, Ontario, Canada, Bayer CropScience Report No.: RAPIY009, Date 2005-11-15, amended 2006-01-31. GLP, unpublished M-269503-03-1 AE C656948 500 SC + pyrimethanil 600 SC—Magnitude of the residue in/on caneberry. Bayer CropScience LP, Environmental Research, Stilwell, KS, USA, Bayer CropScience Report No.: RAGMP079, Date 2008-09-17. GLP, unpublished M-307677-01-1
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