

FLUAZIFOP-P-BUTYL (283)

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EXPLANATION

Fluazifop-P-butyl is a herbicide used for the post-emergence control of grass (graminaceous) weeds in a wide range of broad-leaved crops. Fluazifop-P-butyl was first evaluated for toxicology and residues by the JMPR in 2016. An ADI of 0–0.004 mg/kg bw and an ARfD of 0.4 mg/kg bw were established. The residue definitions were established as follows:

Definition of the residue for compliance with the MRL in plant commodities: total fluazifop, defined as the sum of fluazifop-P-butyl, fluazifop-P-acid (II) and their conjugates, expressed as fluazifop-P-acid.

Definition of the residue for dietary risk assessment in plant commodities: the sum of fluazifop-P-butyl, fluazifop-P-acid (II), 2-[4-(3-hydroxy-5-trifluoromethyl-2-phenoxy)pyridyloxy] propionic acid (XL), 5-trifluoromethyl-2-pyridone (X) and their conjugates, expressed as fluazifop-P-acid.

Definition of the residue for compliance with the MRL and for dietary risk assessment in animal commodities: total fluazifop, defined as the sum of fluazifop-P-butyl, fluazifop-P-acid (II) and their conjugates, expressed as fluazifop-P-acid. The residue is fat-soluble.

Fluazifop-P-butyl was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 JMPR. The current Meeting received new information on the validation of analytical methods and storage stability for green onion, a label and supervised residue trials on strawberry. Since new GAP information had become available for cane berries, blueberries, strawberries and green onion, the Meeting evaluated previously submitted supervised residue trial data on these commodities against the new GAP.

METHODS OF RESIDUE ANALYSIS**Analytical methods**

Validation data for method GRM044.01A on cane berries, blueberries and strawberries, and radiovalidation data, was submitted and reviewed by the 2016 JMPR. The method GRM044.01A was reviewed by the 2016 JMPR, and was considered valid for the determination of fluazifop acid in blueberries (0.02–2.0 mg/kg) and strawberries (0.01–5.0 mg/kg).

The current Meeting received validation data of method GRM044.01A on green onion, the LOQ is 0.01 mg/kg for green onions.

Table 1 Validation data for method GRM044.01A on green onion

Matrix	Fortification level [mg/kg]	Individual recoveries [%]	Range of recoveries [%]	Mean recovery [%]	RSD [%]
Onion (green)	0.01	72, 74, 76, 67, 71, 76	67-76	73	5
	0.1	76, 79, 78	76-79	78	2
	1.0	94, 88, 93	88-94	92	4
	5.0	96, 95, 96	95-96	96	1

Storage stability under frozen condition

The storage stability of fluazifop-P-butyl, fluazifop acid and the metabolite CF-3 pyridone in raw and processed plant commodities and in animal commodities was evaluated by the 2016 JMPR. Fluazifop acid is stable for at least 27 months at -1 °C, 8 months at -15 °C and for 31 months at -20 °C in

raspberries, blueberries, strawberries. The current Meeting received storage stability data for fluazifop in green onion stored at -18 °C. Fluazifop in green onion is stable for at least 625 days.

Table 2 Storage stability of spiked fluazifop in green onion stored at -18 °C

Commodity	Storage time (days)	Spike level (mg/kg)	% remaining (mean)	Concurrent recovery (%)
Green onion	625	0.1	81,83,85 (83)	79

USE PATTERNS

The Meeting received new information on authorised uses on bush berries, cane berries, strawberries, and green/spring onion in the USA. The registered uses received are summarized in the following table. It was noted that a non-ionic surfactant (NIS) or crop oil concentrate (COC) adjuvant is to be used in conjunction with the formulation.

Table 3 Registered uses of fluazifop-P-butyl (EC formulation)

Crop	Country	Application			Max application per season		PHI (days)	Comments
		Method	kg a.i/ha (max)	Water L/ha	No (minimum interval in days)	kg ai/ha		
Bush berries (high bush)*	USA	Spray-ground banded	0.42	47-374	2 (14)	0.84 per year	1	Apply to actively growing target grasses
Cane berries	USA	Spray - ground banded	0.42	47-374	2 (14)	0.84 per year	1	
Strawberries	USA	Broadcast-foliar	0.28	47-374	1	0.28	14	
Onion Green/Spring	USA	Broadcast-foliar	0.42	47-374	2 (14)	0.84 per year	14	

*BLUEBERRY, HIGHBUSH SUBGROUP 13B in the USA includes Aronia berry; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); salal; sea buckthorn; and cultivars, varieties, and/or hybrids of these; BLUEBERRY, LOWBUSH SUBGROUP 13-07B includes lingonberry; currant, native.

RESULTS OF SUPERVISED RESIDUE TRIALS ON CROPS

The Meeting received supervised residue trial data for directed ground spray applications of fluazifop-P-butyl on cane berries and blue berries, and foliar applications on strawberries and green onion.

Group	Crop	Countries	Table no	
004A	Subgroup of cane berries	Black berry	USA	3
004A	Subgroup of cane berries	Raspberry	USA	3
004B	Subgroup of bush berries	Blue berry	USA	4
004E	Subgroup of low growing berries	Strawberry	USA	5
009B	Subgroup of Green Onions	Green onion	USA	6

Results from replicated field plots are listed and mean values are calculated. The results from trials used for the estimation of maximum residue levels (underlined) have been rounded to two

significant digits. Residue values were selected for estimating maximum residue levels and for dietary exposure assessment at longer PHI than GAP, if those values were found to be higher than that at GAP. The highest residue was selected from trials which were considered not to be independent.

Cane berries

The 2016 JMPR evaluated six trials in cane berries (Table 196 (blackberries) and Table 197 (raspberries) in the 2016 JMPR Monograph).

In these trials conducted in the USA, fluazifop-P-butyl (240 g/L EC) was applied as a soil directed spray. Two applications were made 12–16 days apart at a rate of 0.40–0.43 kg ai/ha. Control and treated samples were harvested 1 day after the last application.

Samples were stored frozen for up to 22 months before analysis. Concurrent recovery rates in samples spiked with 0.02–5.0 mg/kg ranged from 88–97% with RSDs of 2–4%, and the LOQ for total fluazifop was 0.02 mg/kg.

Table 4 Residues in cane berries from supervised trials in the USA in 2010

CANE BERRIES Country, year Location (Variety)	Application			Growth Stage	Matrix	DALA	Residues (mg/kg) Total fluazifop (mean)	Reference & Comments	
	N	kg ai/ha (adjuvant)	Spray volume (L/ha)						
USA, 2010 Jackson Springs, NC Black berry (Kiowa)	1+	0.41	196	Some mature berries Most fruit black	Fruit	1	<0.02, <0.02 (<u><0.02</u>)	Report: PR 03947	
	1	0.42 (Induce)	196						
USA, 2010 Aurora, OR Black berry (Marion)	1+	0.42	327	Green fruit Fruiting	Fruit	1	<0.02, <0.02 (<u><0.02</u>)	Report: PR 03947	
	1	0.43 (Prime Oil)	337						
USA, 2010 Dingsburg, CA Black berry (Ouachita)	1+	0.42	290	Fruiting Fruiting	Fruit	1	<0.02, <0.02 (<u><0.02</u>)	Report: PR 03947	
	1	0.40 (Activator 90)	271						
USA, 2010 Holt, MI Raspberry (Heritage)	1+	0.42	187	Fruiting Fruiting	Fruit	1	0.02, 0.07 (<u>0.05</u>)	Report: PR 03947	
	1	0.43 (Activator 90)	187						
USA, 2010 Aurora, OR Raspberry (Willamette)	1+	0.41	187	Green fruit Ripe and green fruit	Fruit	1	<0.02, <0.02 (<u><0.02</u>)	Report: PR 03947	
	1	0.43 (Prime Oil)	196						
USA, 2010 Aurora, OR Raspberry (Willamette)	1+	0.43	281	Small green fruit Red and green fruit	Fruit	0	<0.02, <0.02 (<u><0.02</u>)	Report: PR 03947	
	1	0.43 (Prime Oil)	281			1			<0.02, <0.02 (<u><0.02</u>)
						2			<0.02, <0.02 (<u><0.02</u>)
						4			<0.02, <0.02 (<u><0.02</u>)
						7			<0.02, <0.02 (<u><0.02</u>)

Blue berry

The 2016 JMPR received data on supervised trials conducted in Germany on bilberries and in USA on blueberries. However, as none of these trials matched the critical GAP in France, the 2016 Meeting did not summarize them and was unable to estimate maximum residue levels.

In eight trials conducted in the USA, two applications of fluazifop-P-butyl (240 g/L EC) were applied as a ground banded spray applications to blueberries 12–17 days apart at a rate of 0.41–0.46 kg ai/ha. Samples of blue berries were stored frozen for up to 26 months before analysis. Concurrent recovery rates in samples spiked with 0.02–5 mg/kg ranged from 88–97% with RSDs of 0–3%, and the LOQ for total fluazifop was 0.02 mg/kg.

Table 5 Residues in blue berries from supervised trials in the USA in 2010

BLUE BERRIES Country Year Location (Variety)	Application			Growth Stage	Matrix	DALA	Residues (mg/kg)	Reference & Comments
	N	kg ai/ha (adjuvant)	Spray volume (L/ha)				Total fluazifop (mean)	
GAP: 2×0.42 kg ai/ha (max 0.84 per year), PHI 1 day								
USA, 2010 Alapaha, GA (Brightwell)	1+1	0.41	309	Fruiting	Fruit	1	0.14, 0.25 (0.19)	Report: PR 02083
		0.41 (UAP surfactant, 80/20)	309	Fruiting				
USA, 2010 Cream Ridge, NJ (Duke)	1+1	0.43	178	Fruiting	Fruit	1	<0.02, <0.02 (<0.02)	Report: PR 02083
		0.43 (Agri-Dex)	178	Fruiting				
USA, 2010 Cream Ridge, NJ (Bluecrop)	1+1	0.43	159	Fruiting	Fruit	1	0.05, 0.05 (0.05)	Report: PR 02083
		0.43 (Agri-Dex)	168	Fruiting				
USA, 2010 Castle Hayne, NC (Croatan)	1+1	0.43 0.41 (Induce)	206	Fruiting	Fruit	0	<0.02, <0.02 (<0.02)	Report: PR 02083
			206	Fruiting		1		
						2		
						4		
						6		
USA, 2010 Holt, MI (Jersey)	1+1	0.44	196	Fruiting	Fruit	1	<0.02, <0.02 (<0.02)	Report: PR 02083
		0.46 (Activator 90)	206	Fruiting				
USA, 2010 Fennville, MI (Jersey)	1+1	0.43	187	Fruiting	Fruit	1	<0.02, <0.02 (<0.02)	Report: PR 02083
		0.43 (Activator 90)	187	Fruiting				
USA, 2010 Benton Harbour, MI (Bluecrop)	1+1	0.43	187	Fruiting	Fruit	1	<0.02, <0.02 (<0.02)	Report: PR 02083
		0.43 (Activator 90)	187	Fruiting				

BLUE BERRIES Country Year Location (Variety)	Application			Growth Stage	Matrix	DALA	Residues (mg/kg)	Reference & Comments
	N	kg ai/ha (adjuvant)	Spray volume (L/ha)				Total fluazifop (mean)	
USA, 2010 Aurora, OR (Bluecrop)	1+1	0.44	281	Green fruit	Fruit	1	<0.02, <0.02 (<0.02)	Report: PR 02083
		0.44 (Preference)	281	Green and blue fruit				

Strawberry

The Meeting received six strawberry trials conducted in the USA. Fluazifop-P-butyl (240 g/L EC) was applied once as a foliar spray application to strawberries at a rate of 0.28–0.35 kg ai/ha. Control and treated samples were harvested 14 days after the last application.

Samples were stored frozen for up to 22 months before analysis. Concurrent recovery rates in samples spiked with 0.01–5 mg/kg ranged from 77–99% with RSDs of 1–3%, and the LOQ for total fluazifop was 0.01 mg/kg.

Table 6 Residues in strawberry from supervised trials in the USA in 2011 and 2012

STRAWBERRY Country, year Location (Variety) Trial no.	Application			Growth Stage	Matrix	DAT	Residues (mg/kg)	Reference & Comments
	N	kg ai/ha	Spray volume (L/ha)				Total fluazifop (mean)	
USA, 2012 Holt, MI (Jewel) MI01	1	0.29 (Activator 90)	290	Fruiting/ blooming	Berries without caps	14	0.28, 0.25 (0.27)	Report: PR A2085
USA, 2011 Holt, MI (Jewel) MI51	1	0.28 (Activator 90)	187	Fruiting/ blooming	Berries without caps	14	0.37, 0.37 (0.37)	Report: PR A2085
USA, 2012 Cream Ridge, NJ (Earliglow) NJ01	1	0.29 (Attach)	224	Fruiting/ blooming	Berries without caps	14	1.13, 1.15 (1.14)	Report: PR A2085
USA, 2011 Cream Ridge, NJ (Chandler) NJ06	1	0.30 (Attach)	159	Fruiting/ blooming	Berries without caps	0	0.43, 0.22 (0.33)	Report: PR A2085
						7	0.51, 0.68 (0.59)	
						10	2.37, 2.16 (2.27)	
						14	1.26, 1.43 (1.35)	
						21	0.14, 0.12 (0.13)	
USA, 2011 Freeville, NY (Cabot) NY06	1	0.28 (Crop Oil Concentrate)	309	Fruiting/ blooming	Berries without caps	14	0.63, 0.78 (0.70)	Report: PR A2085
USA, 2011 Aurora, OR (Totem) OR06	1	0.29 (Prime Oil)	346	Fruiting/ blooming	Berries without caps	14	0.61, 0.59 (0.60)	Report: PR A2085

Green/spring onion

The 2016 JMPR received data on supervised trials on green/spring onion conducted in the USA. However, as none of these trials matched the critical GAP in France, the 2016 Meeting did not summarize them and was unable to estimate maximum residue levels for green onion.

Fluazifop-P-butyl (240 g/L EC) was applied twice as a foliar spray application to green/spring onion. Two applications were made 12–16 days apart at a rate of 0.41–0.50 kg ai/ha. Control and treated samples were harvested 12–16 days after the last application.

Samples were stored frozen for up to 20 months before analysis. Concurrent recovery rates in samples spiked with 0.01–5.0 mg/kg ranged from 67–96% with RSDs of 1–5%, and the LOQ for total fluazifop was 0.01 mg/kg.

Table 7 Residues in green onion from supervised trials in the USA in 2011–2012

GREEN ONION Country, year Location Trial code (Variety)	Application			Growth Stage	Residues (mg/kg) Matrix	DALA	Residues(mg/kg) Total fluazifop (mean)	Reference & Comments
	no	kg ai/ha	Spray volume (L/ha)					
USA,2012 Holtsville, CA CA32 (Bunching onion)	2	0.41 0.42 (Nu-Film-P)	224 215	(9-10mm bulb diameter) (12-13mm bulb diameter)	Plant	16	0.13, 0.14 (0.13)	Report: PR 03405
USA,2011 Salinas, CA CA 33 (Guardsman)	2	0.43 0.42 (R-11)	309 309	2-3 leaves 3-4 leaves	Plant	14	0.38, 0.34 (0.36)	Report: PR 03405
USA,2011 Laingsburg, MI MI12 (Long white bunching)	2	0.42 0.42 (Activator 90)	187 187	Vegetative Vegetative	Plant	0 7 9 15 22	0.39, 0.26 (0.33) 3.52, 2.87 (3.20) 0.80, 0.76 (0.79) 0.46, 0.50 (0.48) 0.16, 0.18 (0.17)	Report: PR 03405
USA,1989 Willard, OH OH02 (Long white bunching)	2	0.50 0.43 (Top Surf)	346 355	Vegetative Vegetative	Plant	12	0.63, 0.55 (0.59)	Report: PR 03405

APPRAISAL

Fluazifop-P-butyl is a herbicide used for the post-emergence control of grasses in a wide range of broad-leaved crops. Fluazifop-P-butyl was first evaluated for toxicology and residues by the 2016 JMPR. An ADI of 0–0.004 mg/kg bw and an ARfD of 0.4 mg/kg bw were established. The residue definitions were established as follows:

Residue definition for compliance with the MRL in plant commodities: total fluazifop, defined as the sum of fluazifop-P-butyl, fluazifop-P-acid (II) and their conjugates, expressed as fluazifop-P-acid.

Residue definition for dietary risk assessment in plant commodities: the sum of fluazifop-P-butyl, fluazifop-P-acid (II), 2-[4-(3-hydroxy-5-trifluoromethyl-2-phenoxy)pyridyloxy] propionic acid (XL), 5-trifluoromethyl-2-pyridone (X) and their conjugates, expressed as fluazifop-P-acid.

Residue definition for compliance with the MRL and for dietary risk assessment in animal commodities: total fluazifop, defined as the sum of fluazifop-P-butyl, fluazifop-P-acid (II) and their conjugates, expressed as fluazifop-P-acid. The residue is fat-soluble.

Fluazifop-P-butyl was scheduled at the Fiftieth Session of the CCPR for the evaluation of additional uses by the 2019 JMPR. The current Meeting received new information on the validation of analytical methods and storage stability for green onion, a label and supervised residue trials on strawberry. Since new GAP information had become available for cane berries, blueberries, strawberries and green onion, the Meeting evaluated previously submitted supervised residue trial data on these commodities against the new GAP.

Analytical methods

Method GRM044.01A (modification B) for the determination of total fluazifop (fluazifop-butyl, fluazifop acid (II) and its conjugates) in plant commodities as fluazifop acid was reviewed by the 2016 JMPR. Based on the validation data of method GRM044.01A for cane berries, blueberries and strawberries, and radiovalidation data, the 2019 JMPR considered that method GRM044.01A was suitable for determination of fluazifop-P-butyl residues in the supervised field trials on cane berries, blueberries and strawberries. The LOQs are 0.02 mg/kg for blueberries and cane berries, and 0.01 mg/kg for strawberries.

The current Meeting received validation data for green onion (GRM044.01A modification B). The Meeting considered that method GRM044.01A (modification B) was suitable for determination of fluazifop-P-butyl residues in the supervised field trials on green onion as fluazifop acid with an LOQ of 0.01 mg/kg.

Storage stability of residues

The storage stability of fluazifop acid was evaluated by the 2016 Meeting in cane berries, blueberries and strawberries. The 2016 Meeting concluded that fluazifop acid is stable when stored frozen for at least 27 months at -1 °C, 8 months at -15 °C and for 31 months at -20 °C in raspberries, blueberries and strawberries.

The current Meeting received new data on storage stability of fluazifop in green onion (spiked with fluazifop and determined by GRM044.01A modification B) at -18 °C, and concluded that fluazifop was stable for at least 20 months.

Results of supervised residue trials on crops

The Meeting received supervised residue trial data for directed ground spray applications of fluazifop-P-butyl on cane berries and blue berries, and foliar applications on strawberries and green onion.

Cane berries

The current Meeting evaluated the USA trials provided to the 2016 Meeting against the GAP from the USA. Critical GAP for cane berries in the USA allows two ground banded spray applications at a rate of 0.42 kg ai/ha with an interval of 14 days and a PHI of 1 day.

Five independent supervised field trials were conducted on cane berries in the USA approximating the critical GAP.

The total fluazifop residues in blackberry were (n = 3): < 0.020 (3) mg/kg. The total fluazifop residues in raspberry were (n = 2): < 0.020, 0.05 mg/kg.

The combined total fluazifop residues in cane berries were (n = 5): < 0.020 (4), 0.05 mg/kg.

The Meeting noted that the GAP of the USA is for the cane berries subgroup, and that blackberry and raspberry are representative commodities for the subgroup of cane berries. The Meeting decided to estimate a maximum residue level of 0.08 mg/kg for the subgroup of cane berries to replace the previous recommendation. The Meeting estimated a median of 0.02 mg/kg and highest residue of 0.07 mg/kg (highest individual).

Using the multiplication factor of 1.05 to the median and highest residues, the Meeting estimated an STMR of 0.021 mg/kg and an HR of 0.074 mg/kg (highest individual 0.07×1.05).

Bush berry

Blueberry

The current Meeting evaluated the data from the USA provided to the 2016 Meeting against the new GAP from the USA. Critical GAP in the USA for bush berries (high bush) allows two ground banded spray applications at a rate of 0.42 kg ai/ha with an interval of 14 days and a PHI of 1 day.

Seven independent trials on blueberries were conducted in the USA approximating the cGAP. The total fluazifop residues in blueberries were (n = 7): < 0.020 (5), 0.05, 0.19 mg/kg.

The Meeting noted that the USA GAP is for the bush berries subgroup, and that blueberry is the representative commodity for the subgroup. The Meeting decided to estimate a maximum residue level of 0.3 mg/kg for the subgroup of bush berries. The Meeting estimated a median of 0.02 mg/kg and highest residue of 0.25 mg/kg (highest individual).

Using the multiplication factor of 1.05 to the median and highest residues, the Meeting estimated an STMR of 0.021 mg/kg and an HR of 0.26 mg/kg (highest individual 0.25×1.05).

The Meeting noted that the USA GAP for bush berries (high bush) also covers high bush cranberries and elderberry, listed in the Codex Classification as Guelder rose (*Viburnum opulus* L) and elderberries (*Sambucus spp.*) in the subgroup of large shrub/tree berries, and agreed to extrapolate the maximum residue level of 0.3 mg/kg, STMR of 0.021 mg/kg and HR of 0.26 mg/kg for fluazifop to Guelder rose and elderberries.

The Meeting decided to withdraw the previous recommendations of 0.01(*) mg/kg for currants, black, red, white, and for gooseberries.

Strawberry

The critical GAP in the USA for strawberry allows one foliar spray application at a rate of 0.28 kg ai/ha with a PHI of 14 days.

The Meeting received six supervised field trials conducted on strawberry in the USA approximating the critical GAP.

The total fluazifop residues in strawberry were (n = 6): 0.27, 0.37, 0.60, 0.70, 1.1 and 1.4 mg/kg.

The Meeting estimated a maximum residue level of 3 mg/kg for strawberry to replace the previous recommendation. The Meeting estimated a median of 0.65 mg/kg and highest residue of 1.43 mg/kg (highest individual).

Using the multiplication factor of 1.05 to the median and highest residues, the Meeting estimated an STMR of 0.685 mg/kg and an HR of 1.5 mg/kg (highest individual 1.43×1.05) for strawberry.

Green onion

The critical GAP in the USA for green onion allows two foliar applications of 0.42 kg ai/ha with an interval of 14 days and a PHI of 14 days.

Four independent trials were conducted in the USA on green onion approximating the US GAP, total fluazifop residues were (n = 4): 0.13, 0.36, 0.48 and 0.59 mg/kg.

The Meeting concluded that the data were insufficient for estimating a maximum residue level for green onion.

Residues in animal commodities

None of the commodities for which supervised trial data were submitted to the current Meeting or their by-products are fed to animals. The Meeting confirmed its previous recommendations for animal commodities.

RECOMMENDATIONS

On the basis of the data from supervised trials, the Meeting concluded that the residue levels listed below are suitable for establishing maximum residue limits and for IEDI and IESTI assessment.

Definition of the residue for compliance with the MRL in plant commodities: total fluazifop, defined as the sum of fluazifop-P-butyl, fluazifop-P-acid (II) and their conjugates, expressed as fluazifop-P-acid.

Definition of the residue for dietary risk assessment in plant commodities: the sum of fluazifop-P-butyl, fluazifop-P-acid (II), 2-[4-(3-hydroxy-5-trifluoromethyl-2-phenoxy)pyridyloxy] propionic acid (XL), 5-trifluoromethyl-2-pyridone (X) and their conjugates, expressed as fluazifop-P-acid.

Definition of the residue for compliance with the MRL and for dietary risk assessment in animal commodities: total fluazifop, defined as the sum of fluazifop-P-butyl, fluazifop-P-acid (II) and their conjugates, expressed as fluazifop-P-acid.

The residue is fat-soluble.

Table 1 Residue levels suitable for establishing maximum residue levels and for dietary exposure

CCN	Commodity Name	Recommended Maximum residue level (mg/kg)		STMR or STMR-P (mg/kg)	HR (mg/kg)
		New	Previous		
FB 2005	Cane berries, Subgroup of	0.08	0.01(*)	0.021	0.074
FB 0021	Currants, black, red, white	W	0.01(*)		
FB 0268	Gooseberry	W	0.01(*)		
FB 2006	Bush berries, Subgroup of	0.3	-	0.021	0.26
FB 0267	Elderberries	0.3		0.021	0.26
FB 2254	Guelder rose	0.3		0.021	0.26
FB 0275	Strawberry	3	0.3	0.685	1.5

DIETARY RISK ASSESSMENT

Long-term dietary exposure

The ADI for fluazifop-P-butyl is 0–0.004 mg/kg bw. The International Estimated Daily Intakes (IEDIs) for fluazifop-P-butyl were estimated for the 17 GEMS/Food Consumption Cluster Diets using the STMR or STMR-P values estimated by the JMPR. The results are shown in Annex 3 of the 2019 JMPR Report. The IEDIs ranged from 30–160% of the maximum ADI of 0.004 mg/kg bw. An exceedance was found for GEMS/Food cluster diet G16 (160%).

Based on the decision of CCPR 2017 (REP17/PR) to withdraw the draft MRLs for sweet potato and yam the IEDIs ranged from 20–90% of the maximum ADI of 0.004 mg/kg bw. On this basis, the Meeting concluded that the long-term dietary exposure to residues of fluazifop-P-butyl from uses considered by the JMPR (excluding sweet potato and yam) is unlikely to present a public health concern.

Acute dietary exposure

The ARfD for fluazifop-P-butyl is 0.4 mg/kg bw. The International Estimate of Short Term Intakes (IESTIs) for fluazifop-P-butyl were calculated for food commodities and their processed commodities for which HRs/HR-Ps or STMRs/STMP-Ps were estimated by the current Meeting and for which consumption data were available. The results are shown in Annex 4 of the 2019 JMPR Report.

The IESTIs varied from 0–6% of the ARfD for children and 0–3% for the general population. The Meeting concluded that acute dietary exposure to residues of fluazifop-P-butyl from uses considered by the current Meeting is unlikely to present a public health concern.

References

Reference	Author(s)	Year	Title
Report: PR 02083	Arsenovic, M, Jolly, C	2013	Fluazifop-P-butyl: Magnitude of the Residue on Blueberry. Report No. IR-4 PR 02083 Syngenta file No. PP5_50557
Report: PR 03947	Arsenovic, M, Jolly, C	2013	Fluazifop-P-butyl: Magnitude of the Residue on Caneberry. Report No. IR-4 PR 03947 Syngenta file No. PP5_50556
Report: PR A2085	Arsenovic, M	2014	Fluazifop-P-butyl: Magnitude of the Residue on Strawberry, Perennial Report No. IR-4 PR A2085 Syngenta file No. PP5_50553
Report: PR 03405	Arsenovic, M	2014	Fluazifop-P-butyl: Magnitude of the Residue on Onion (Green) Report No. IR-4 PR 03405 Syngenta file No. PP5_50555