SAFLUFENACIL (251)

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APPRAISAL

Saflufenacil is a herbicide belonging to the uracil family of compounds. The biochemical mode of action is a protoporphyrinogen IX oxidase (PPO) inhibitor. Saflufenacil was evaluated as a new compound by the 2011 JMPR. The 2011 Meeting determined that the residue definition for MRL compliance and estimation of dietary intake for both plant and animal commodities is parent saflufenacil, and that the residue is not fat-soluble. The 2011 Meeting also derived an ADI of 0–0.05 mg/kg bw and determined that an ARfD is not necessary.

Saflufenacil was listed by the 48th Session of the CCPR for evaluation of additional MRLs; specifically, extrapolation of the existing Codex MRL and STMR for residues of saflufenacil in rape seed (0.6 mg/kg and 0.054 mg/kg, respectively) to linseed and mustard seeds. The Meeting received information on the registered uses of saflufenacil on flax and mustard, on the proposed modifications to the Codex oilseeds crop group, and summary data showing residue levels of another compound on rape seed, linseed, and mustard seed.

Extrapolation of rape seed recommendations to linseed and mustard seed

The Meeting noted that the revised commodity classification for the Codex Oilseed Group (023) is currently at Step 7 in the approval process and is expected to be advanced for adoption at the 2018 CAC. Subgroup A of the Oilseed Group contains *inter alia* rape seed, linseed, and mustard seed; all of which are enclosed in pod-like capsules throughout the growing season.

On the basis of the pending crop grouping and on the Canadian registered use pattern for all three crops being identical (up to 50 g ai/ha by ground or aerial application, 3-day pre-harvest interval), the Meeting decided to extrapolate the recommendations for rape seed to linseed and mustard seed.

For linseed and mustard seeds, the Meeting estimates maximum residue levels of 0.6 mg/kg and STMRs of 0.054 mg/kg.

RECOMMENDATIONS

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

Definition of the residue (for compliance with the MRL and for estimation of dietary intake) for plant and animal commodities: *saflufenacil*.

The residue is not fat-soluble.

		MRL, mg/kg			
CCN	Crop/Commodity	New	Previous	STMR	Highest Residue
SO 0090	Mustard seeds	0.6		0.054	--
SO 0693	Linseed	0.6		0.054	--

DIETARY RISK ASSESSMENT

Long-term dietary exposure

The International Estimated Daily Intakes (IEDIs) of saflufenacil were calculated for the 17 GEMS/Food cluster diets using STMRs/STMR-Ps estimated by the current and previous Meetings. The ADI is 0–0.05 mg/kg bw and the calculated IEDIs were 2–20% of the maximum ADI (0.05 mg/kg bw). The Meeting concluded that the long-term dietary exposure to residues of

saflufenacil, when used in ways that have been considered by the JMPR, are unlikely to present a public health concern.

Short-term dietary exposure

The 2011 JMPR decided that an acute reference dose is unnecessary for saflufenacil. The Meeting therefore concluded that the short-term dietary exposure to residues of saflufenacil resulting from uses that have been considered by the JMPR is unlikely to present a public health concern.