

5.25 PYRIMETHANIL (226)

RESIDUE AND ANALYTICAL ASPECTS

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.

Bush berries (blueberries)

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.

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.

