

## ALDICARB

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### EXPLANATION

Aldicarb residues were last evaluated by the JMPR in 2001 and 2002. In 2001 residues in individual units of banana and potato and a processing study on potato were evaluated. The Meeting recommended a maximum residue level of 0.2 mg/kg for banana and confirmed a previous recommendation of 0.5 mg/kg for potato.

The IESTI calculated for banana, potato and microwaved potato exceed the ARfD for aldicarb (0.003 mg/kg bw) for both the general population (excluding women of child-bearing age) (140–160% above the ARfD) and children (330–560% above the ARfD). A variability factor of 5 was used in the calculation of the intake for banana. In 2002, based on additional residue data provided from individual banana fingers and composite samples, the Meeting recommended the application of a variability factor of 3 for the calculation of the IESTI of aldicarb in banana. The refined IESTI represented 40% ARfD for the general population and 110% ARfD for children.

For potato, a highest residue from individual unit data of 1.2 mg/kg was used in the first term of the equation for case 2a, with no variability factor (see Chapter 3 of 2003 JMPR Report). The HR from a composite sample (0.45 mg/kg) was used in the second part of the equation.

At its 35<sup>th</sup>, 36<sup>th</sup>, 37<sup>th</sup> and 38<sup>th</sup> Sessions, the CCPR returned the draft MRL for banana and potato to Step 6 due to acute intake concerns. The Committee requested that the JMPR consider using alternative GAPs to estimate lower MRLs (see General Considerations 2.3). The present Meeting received GAP information for potato from the government of The Netherlands.

The residue definition of aldicarb is the sum of aldicarb, aldicarb sulfone and aldicarb sulfoxide, expressed as aldicarb.

### *Results of supervised residue trials*

#### *Banana*

Based on twenty four trials conducted in France (Guadelupe and Martinique) and Côte d'Ivoire submitted to the 2001 JMPR with bagged and unbagged banana according to GAP, the Meeting recommended a HR of 0.10 mg/kg in banana pulp and a maximum residue level of 0.2 for aldicarb in banana. No additional residues trials or GAP information were provided.

The Meeting concluded that none of the residue data relating to available GAP suggests a lower maximum residue level to replace the current proposal of 0.2 mg/kg for aldicarb in banana.

#### *Potato*

Forty five trials conducted in Europe and USA with aldicarb in potatoes according to GAP were evaluated by the 2001 JMPR. Twenty trials were conducted according to GAP of the Netherlands (furrow application at 12.8 g/100m, corresponding to 1.7 kg ai/ha or broadcast application of 3.36 kg ai/ha), giving a highest residue of 0.36 mg/kg. Nine trials conducted according to GAP in Greece, Italy and Spain (furrow at 2.5 kg ai/ha) gave a highest residue of 0.45 mg/kg. In Europe, the PHI is 90 days. Sixteen trials conducted in the USA (GAP of 3.36 kg ai/ha with a PHI of 150 days, positive displacement) gave a highest residue of 0.20 mg/kg.

New GAP information in the Netherlands indicates a furrow application of 0.75 kg ai/ha and broadcast application of 3 kg ai/ha with no specified PHI. Ten furrow trials (at 13 g/100m) previously evaluated against the Netherlands GAP do not match the new GAP.

The residues derived from the 35 trials, according to the current GAP, in ranked order were: < 0.02, < 0.03 (3), 0.02 (2), 0.03 (6), 0.04 (6), 0.05, 0.06 (4), 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.18, 0.20 (2), 0.27 (2), 0.36 and 0.45 mg/kg.

The Meeting concluded that none of the residue data relating to available GAP suggests a lower maximum residue level to replace the current proposal of 0.5 mg/kg for aldicarb in potato.