Examples of the BNN- orientation value for pesticides

Example 1

In a sample of tomatoes **0.025 mg/kg Azoxystrobin** was detected.

The BNN-orientation value for Azoxystrobin was not met even allowing for an analytical variance of 50%[1].

[The actual content is between 0.0125 (0.025 - 50%) and 0.0375 (0.025 + 50%) mg/kg with a probability of 95%. That clearly exceeds 0.010 mg/kg].

The sample of tomatoes does **not** comply with the BNN-orientation value.

Example 2

In a sample of lemons **0.017 mg/kg Dicofol**, **0.013 mg/kg Ortho-Phenylphenol** and **0.007 mg/kg Imazalil** were detected.

Dicofol

The BNN-orientation value for Dicofol is met when an analytical variance of 50% is considered[1]

[The actual content is between 0.0085 (0.017 - 50%) and 0.0255 (0.017 + 50%) mg/kg with a probability of 95%. So 0.010 mg/kg is not clearly exceeded.]

Ortho-Phenylphenol

The BNN-orientation value for Ortho-Phenylphenol is met when an analytical variance of 50% is considered[1]

[The actual content is between 0.0065 (0.013 - 50%) and 0.0195 (0.013 + 50%) mg/kg with a probability of 95%. So 0.010 mg/kg is not clearly exceeded.]

Imazalil

The BNN-orientation value for Imazalil was met.

Regulation of multiple residues

The regulation for multiple residues is met, as only two substances >= 0.010 mg/kg were detected.

[The detected contents of Dicofol and Ortho-Phenylphenol are above 0.010 mg/kg. The analytical variance may not beconsidered here. As Imazalil was detected < 0.010 mg/kg, this substance is not counted.]

The sample of lemons complies overall with the BNN-orientation value.

Example 3

In a sample of dried apricots **0.06 mg/kg Captan**, **0.08 mg/kg Carbendazim** and **0.05 mg/kg Dodin** were detected.

Captan

The content of Captan is 0.012 mg/kg referred to the fresh product. (The conversion factor for dried fruit is 5, so 0.06 mg/kg Captan/5 = 0.012 mg/kg)

The BNN-orientation value for Captan is met when an analytical variance of 50% is considered[1].

[The actual content is between 0.006 (0.012 - 50%) and 0.018 (0.012 + 50%) mg/kg with a probability of 95%. So 0.010 mg/kg is not clearly exceeded.]

Carbendazim

The content of Carbendazim is 0.016 mg/kg referred to the fresh product. (The conversion factor for dried fruit is 5, so 0.08 mg/kg Carbendazim/5 = 0.016 mg/kg)

The BNN-orientation value for Carbendazim is met when an analytical variance of 50%[1] is considered[1].

[The actual content is between 0.008 (0.016 - 50%) and 0.024 (0.016 + 50%) mg/kg with a probability of 95%. So 0.010 mg/kg is not clearly exceeded.]

Dodin

The content of Dodin is 0.010 mg/kg referred to the fresh product. (The conversion factor for dried fruit is 5, so 0.05 mg/kg Dodin/5 = 0.010 mg/kg)

The BNN-orientation value for Dodin is met.

Regulation of multiple residues

The sample violates the regulation for multiple residues, as three substances >= 0.010 mg/kg were detected.

[The detected contents of Captan, Carbendazim and Dodin are – even under application of the drying factor for dried fruit - above 0.010 mg/kg. The analytical variance may not be considered here.]

The sample of dried apricots does not comply overall with the BNN-orientation value.

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[1] **Quality Control Procedures for Pesticide Residues Analysis, Document No. SANCO/10684/2009**