Food Safety Commission of Japan

This is a provisional English translation of an excerpt from the original full report.

Risk Assessment Report

Benzyladenine

(Pesticides)

Food Safety Commission of Japan (FSCJ) April 2014

ABSTRACT

FSCJ conducted a risk assessment of benzyladenine (CAS No. 1214-39-7), a plant growth regulator, based on summary reports made by applicants.

The data used in the assessment are on: fate in animals (rats and dogs), fate in plants (grapes), residues in crops, subacute toxicity (rats, mice and dogs), subacute neurotoxicity (rats), chronic toxicity (dogs), combined chronic toxicity/carcinogenicity (rats), carcinogenicity (mice), two-generation reproductive toxicity (rats), developmental toxicity (rabbits), genotoxicity and others.

Major adverse effects of benzyladenine observed are: decreased body weight gain, increased weights and others in the liver, as well as degeneration of renal tubular epithelia and others in the kidney of dogs. No neurotoxicity, carcinogenicity, effects on reproductive ability, teratogenicity or genotoxicity were observed.

Based on the results of various studies, benzyladenine (parent compound only) was included in a residue definition for dietary risk assessment in agricultural products.

The lowest no-observed-adverse-effect level (NOAEL) obtained in all tests was 6.25 mg/kg body weight/day obtained in the developmental toxicity study in rabbits. FSCJ specified an acceptable daily intake (ADI) of 0.062 mg/kg body weight/day by applying a safety factor of 100 to the NOAEL.