

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

## **Risk Assessment Report**

Quinoclamine (Pesticides)

Food Safety Commission of Japan (FSCJ)
October 2013

## **ABSTRACT**

FSCJ conducted a risk assessment of "quinoclamine" (CAS No. 2797-51-5), a herbicide having the structural features of naphthoquinone, based on summary reports made by applicants.

The data used in the assessment are on: fate in animals (rats), fate in plants (rice and lotus root), residues in crops, subacute toxicity (rats, dogs, etc.), chronic toxicity (rats and dogs), carcinogenicity (rats and mice), 2-generation reproductive toxicity (rats), developmental toxicity (rats and rabbits) and genotoxicity.

Major adverse effects of quinoclamine observed are: decreased body weight gain and epithelium hyperplasia of the urinary tract. Quinoclamine did not affect reproductive capacity and had no developmental toxicity or genotoxicity relevant to human health.

In a chronic toxicity study and a carcinogenicity study in rats, an increased incidence of transitional cell papilloma in the urinary bladder was observed in males and females at 676 ppm.

However, a genotoxic mechanism was not likely to be involved in tumor development; it was considered possible to establish a threshold dose in the assessment.

Based on various study results, only quinoclamine (parent compound) was considered as a residue definition for dietary risk assessment in agricultural products and fishery products.

The minimum value of the no observed adverse effect level (NOAEL) obtained in all tests referred to was 0.21 mg/kg bw/day obtained in the two-year carcinogenicity study in rats. FSCJ specified an acceptable daily intake (ADI) of 0.0021 mg/kg bw/day by applying a safety factor of 100 to the NOAEL.