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Subchronic toxicity study in rats evaluating genetically modified DAS-81419-2 soybean

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1 **Subchronic Toxicity Study in Rats Evaluating Genetically Modified DAS-81419-2**
2 **Soybean**

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10 A 90-day feeding study in rats was conducted to evaluate the subchronic oral
11 toxicity of genetically modified (GM) DAS-81419-2 soybean. Wistar rats were fed
12 with diets containing toasted soybean meal produced from DAS-81419-2 soybean
13 grain that expresses the Cry1F, Cry1Ac, and Pat proteins or containing conventional
14 soybean at doses of 30.0%, 15.0%, 7.5%, or 0% (control group) for 90 consecutive
15 days. The general behavior, body weight and food consumption were observed. At the
16 middle and end of the experiment, blood, serum, and urine samples were collected for
17 biochemical assays. At the conclusion of the study, the internal organs were weighed
18 and histopathological examination was completed. The rats exhibited free movement
19 and shiny coats without any abnormal symptoms or abnormal secretions in their noses,
20 eyes, or mouths. There were no adverse effects on body weight in GM soybean
21 groups and conventional soybean groups. No biological differences in hematological,
22 biochemical, or urine indices were observed. No significant differences in relative
23 organ weights were detected between the experimental groups and the control group.
24 No histopathological changes were observed. Under the conditions of this study,
25 DAS-81419-2 soybean did not cause any treatment-related effects in Wistar rats
26 following 90 days of dietary administration.

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28 **Key words:** genetically modified soybean; *cry1F* gene; *cry1Ac* gene; 90-day feeding study;
29 subchronic toxicity; rat

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