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Poster Session

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Safety issues concerning common ragweed

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The spreading of common ragweed, accelerated by climate changes seems to be unstoppable. This plant is becoming part of our diet and medication accidentally or intentionally. It appears in human food as contaminant, and as an easy accessible and cheap plant, *A. artemisiifolia* is already in use as basic ingredient of few food supplements. Although the high allergenic potential of this herb is well-known, the effect of long-term consumption has not been studied, yet.

The aim of our work was to study the subacute toxicity of *A. artemisiifolia*. Repeated-dose toxicity of a ragweed puree was tested on 24 male Wistar rats. The puree was administered in low dose (500 mg/kg b.w.) and high dose (1000 mg/kg b.w) ragweed in cookie balls. Animals in the control group received plain cookie dough without ragweed. Clinical symptoms, blood chemical parameters, body weight and organ weights of the rats were measured. After 28 days of treatment animals were over-anaesthetized and dissected.

In the high dose group the liver function enzymes (AST, ALT) and the carbamide level have been significantly reduced (Fig A, B). In the low dose group decreased triglyceride level was observed (Fig C). In both groups the weight of the liver relative to body weight was significantly reduced, while the brain weight relative to body weight was significantly elevated in both groups. Repeated use of ragweed resulted in toxic effects in rats and these results question the safety of long-term human consumption of *A. artemisiifolia*-containing products.

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