

## Abstract

*F. vulgare* is a perennial herb that has been traditionally used as medicine for a variety of ailments. It has also been used as a medication due to its antimicrobial, antifungal, and antiviral properties. Previous studies have highlighted issues associated with the poor quality of therapeutic herbal products commercially available, thus a standardization for safety and toxicity profiling of herbal medicine was conducted with a toxicological preclinical evaluation of herbal medicine with *in vivo* models. Findings were observed that 1000 mg/kg of *F. vulgare* extract did not induce toxicity during the 90-day period due to some data being unavailable as data collected was less than three data points, thus t-test analysis cannot be performed. Several biochemical data have negative values caused by technical and human error during analysis. assessment of toxicity was performed by evaluating each of the biochemical biomarkers in determining the adverse effects of *F. vulgare* on critical organs.

Keywords: Fennel, *F. vulgare*, biochemical testing, subchronic toxicity, mice model