

## Original Paper

# Evaluation of antiemetic effect of metabolic, aesthetic and aqueous extracts of *Citrus aurantium L.* on chicken

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## Abstract

**Background and Objective:** The flowers of *Citrus aurantium L.* are traditionally used in the treatment of neurological disorders such as seizures, epilepsy and neurasthenia. With regard to the importance of nausea and vomiting and effects of strengthening the stomach of *Citrus aurantium L.* extract, this study, was done to determine the antiemetic effect of the metabolic, aesthetic and aqueous extract of flowers of *Citrus aurantium L.* in young chickens.

**Methods:** In this experimental study, induction of emesis was performed in 138 young chickens (23 groups, n=6) using copper sulfate (60 mg/kg, orally) and ipecac (600 mg/kg, orally). The aqueous, methanolic and acetonic extract at doses of 50, 100 and 250 mg/kg/bw were injected intraperitoneally (i.p.) and metoclopramide (as positive control). The number of nausea was recorded 50 and 20 minutes after copper sulfate and ipecac administration, respectively.

**Results:** Our results showed that all kind of extract at doses of 100 and 250 mg/kg significantly inhibited copper sulfate and ipecac induced-emesis that showed better effect than metoclopramide. Also, comparison of antiemetic effect of different extract revealed that methanolic, aqueous and acetonic had better effect on prevention of nausea, respectively in comparison with metoclopramide.

**Conclusion:** All kinds of *Citrus aurantium* (Methanolic, Aesthetic and Aqueous) showed antiemetic effect due to copper sulfate and ipecac dose dependly in Young chicken in comparison with metoclopramide.

**Keywords:** *Citrus aurantium*, Antiemetic, Copper sulfate, Ipecac, Metoclopramide, Young chicken

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