



De La Salle University – Dasmariñas

**ANTI-ALLERGIC PROPERTIES OF CRUDE *Allium cepa* L. (ONION)
EXTRACTS IN *Mus musculus* (ALBINO MICE) WITH
INDUCED ALLERGIC RHINITIS**

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ABSTRACT

The present study demonstrates the anti-allergic properties of crude *Allium cepa* L. (onion) extracts in *Mus musculus* (albino mice) with induced allergic rhinitis. Twenty-four male albino mice were first sensitized with ovalbumin and aluminum hydroxide to induce allergic rhinitis. The control group received distilled water while the experimental groups (T₁, T₂ and T₃) received oral administration via gavage method of 100 mg/kg, 300 mg/kg and 500 mg/kg of crude onion extracts. The clinical scores and average percentage blood count of albino mice were assessed to determine which of the treatment exhibited the highest effect after the administration of crude onion extracts. It was found out that among the treatment groups, there was no significant difference in the clinical scores of T₂ and T₃. On the other hand, T₁ exhibited the highest effect for the average percentage of lymphocytes and eosinophils, although the difference with other experimental group was minimal. Thus, the results of this study show that the components of crude onion extracts have anti-allergic properties and could be used as an alternative treatment for managing allergic rhinitis.