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## Anthelmintic properties of *Cucurbita pepo* seed extracts

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### Abstract

Across the globe, *Cucurbita pepo* is widely used both as food and as traditional medicine. This research details the determination of the chemical constituents, and pharmacological and medicinal uses of *Cucurbita pepo* seeds as a potential anthelmintic. Herbicidal drugs are promising for the minimization of certain human diseases because they have been proven to be effective with minimal side effects and are less expensive. There are increased cases of human worm infections like the roundworms and tapeworms. Also, there have been reported many cases of unavailability of the anthelmintics and ineffectiveness of the available anthelmintics. These factors prompt the need for this research intending to develop cheaper, more effective, anthelmintic in the local curbing of the human worms infections. The main objective of this research is to analyze the phytochemicals and identify the Active Pharmacological Ingredient (API) in *Cucurbita pepo* seed extracts concerning human worms' infection treatment. The seed extracts were tested for moisture retention, phytochemicals by wet chemistry, functional groups by Fourier Transform Infrared spectroscopy analysis, colour tests for API, efficacy using *Lumbricos rubellus*, essential metals zinc, copper, and magnesium by Atomic Absorption Spectrophotometry (AAS) and identification of the Active Pharmacological Ingredient (API) by Gas Chromatography for Mass spectrophotometry (GC-MS). The above was carried out in a controlled experimental design by spectrophotometry, chromatography, and wet chemistry. The seed extracts were found to contain high amounts of zinc, fatty acids and their derivatives, and macrocyclic lactones responsible for their antihelmintic properties.

**Keywords;** Helminthes, Anthelmintic, Phytochemicals, *Cucurbita pepo*, macrocyclic lactones

