

ABSTRACT

Inflammation is a biological response that can be initiated by the immune system. This response is vital as it aids in the healing of injuries and infections caused by foreign agents. Nevertheless, while acute inflammation serves a beneficial purpose, prolonged or chronic inflammation can detrimentally impact cellular, tissue, and organ health, potentially leading to internal scarring. Candlenut, scientifically known as *Aleurites moluccanus*, is a tree native to Southeast Asia and is widely cultivated for its seeds. Like many nuts and seeds, Candlenut has garnered attention because it contains various bioactive compounds that pose health benefits, especially anti-inflammatory properties. However, there are still limited studies on the anti-inflammatory capacity of Candlenut. In this study, the anti-inflammatory properties of Candlenut ethanol extract (CEE) was examined *in vitro*. To address this gap, this study employs cell culture techniques, specifically utilizing the RAW264.7 cell, complemented by ELISA analyses to quantify the cytokines production. The result showed that the CEE showed anti-inflammatory potential by the decreased number of cytokines production in RAW264.7 cell that was treated with CEE.

Keywords: *Anti-inflammatory, Candlenut, RAW264.7, ELISA*