ABSTRACT

Lime (Citrus aurantifolia) and parijoto (Medinilla speciosa) are medicinal plants that grow abundantly in Indonesia and contain bioactive compounds with various pharmacological benefits. Lime contains flavonoids such as eryocytrin, hesperidin, and neoponsirin, which are known to have antibacterial, antifungal, antioxidant and anti-inflammatory activities. Meanwhile, parijoto which grows in tropical areas has antioxidant potential and is believed to be beneficial for reproductive health. Fungal infections, especially those caused by Candida albicans, are a common health problem in tropical areas, including canker sores. To overcome this problem, the development of therapies based on natural ingredients such as lime and parijoto extracts is a promising alternative. Canker sore plasters made from flavonoid extracts from these two plants can provide a natural solution to speed up healing and reduce inflammation in canker sores, as well as offering safety and minimal side effects compared to chemical drugs. This research aims to explore the potential of flavonoid extraction from lime and parijoto as a therapeutic agent in canker sore plaster, with the hope of producing an effective, safe and practical formulation for the treatment of oral health problems, especially canker sores, as well as contributing to the development of natural ingredient-based therapies. The method used in this research is the experimental method. The results obtained from this research are that lime and parijoto extracts can inhibit the Candida albicans fungus with an inhibition zone of 0.4 cm. A hydrogel patch preparation that is effective and safe to use is a hydrogel patch with a concentration of 20% lime extract and 40% parijoto with a pH of 4 which is in accordance with safe skin pH standards.

Keywords : Lime, Parijoto, Canker sore, Hydrogel Plaster