

**DAYA HAMBAT EKSTRAK BIJI AVOKAD (*Persea americana* Mill.)
TERHADAP POLIBAKTERI PADA ULSER RECURRENT APHTHOUS
STOMATITIS (Uji Eksperimental In Vitro)**

**INHIBITION EFFECT OF AVOCADO SEED (*Persea americana* Mill.)
EXTRACT ON POLYBACTERIA IN ULCER OF RECURRENT
APHTHOUS STOMATITIS (In Vitro Experimental Test)**

ABSTRACT

Background. Recurrent Aphthous Stomatitis (RAS) is an oral mucosal disease characterized by recurring ulcers without any signs of other diseases. The ulcers are well demarcated, covered by yellow or gray pseudomembrane, surrounded by an erythematous halo. RAS is the most common painful ulcers that affects 20% of general population causes difficulty in speaking, eating, and swallowing, also disrupts patient's comfort and daily activity. RAS is a self limiting disease, but presence of polybacteria plays role in causing secondary infection which delays healing. Avocado is one of the medicinal herbs that has many benefits. Avocado seed possesses antibacterial activity through its phytochemical contents (saponin, tannin, flavonoid, alkaloid, and polyphenol) which may be beneficial in the development of pharmacological substance for RAS. **Purpose.** The aim of this study was to determine the inhibition effect of avocado seed extract towards the growth of polybacteria in ulcer of RAS. **Method.** Polybacteria isolated from healthy male aged 22 years, who suffered Major RAS. The ulcer swabbed with Levine's technique then incubated in Brain Heart Infusion Broth. Avocado seed extracted with ethanol 96% using percolation method was diluted in different concentrations: 100%, 50%, 25%, 12,5%, 6,25%, 3,125%, 1,5625%, and 0,78125%. Inoculums dipped in Avocado seed extract and put on the nutrient agar media. After 24 hours, colonies of polybacteria in RAS ulcers were counted. **Result.** The colony count on the concentration 100%, 50%, 25%, and 12,5% were none, while on the concentration 6,25%, 3,125%, 1,5625%, and 0,78125% showed growth of polybacteria colonies. **Conclusion.** Avocado seed extract can inhibit the growth of polybacteria in ulcer of RAS. The minimum inhibitory concentration (MIC) is 6,25% and the minimum bactericidal concentration (MBC) is 12,5%.

Key words: Avocado seed, Polybacteria, Recurrent Aphthous Stomatitis, Inhibition effect