INTISARI

ARIMURNI, 2020. REVIEW FORMULASI PASTA GIGI KULIT BATANG KAYU MANIS (*Cinnammomum burmanni* BI) DAN KULIT BATANG KAYU SIWAK (*Salvadora persica)* DENGAN BERBAGAI GELLING AGENT SEBAGAI ANTIBAKTERI *Streptococcus mutans*.FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Karies gigi menjadi penyakit utama dalam permasalahan gigi dan mulut, Pasta gigi dipergunakan tidak hanya orang dewasa tetapi juga anak-anak. Salah satu tanaman yang memiliki kandungan aktivitas antibakteri adalah kulit batang kayu manis (*Cinnammomum burmannii*.BI) dan kulit batang kayu siwak *(Salvadora persica).* Review ini bertujuan untuk memberikan aktivitas antibakteri, pasta gigi dengan penambahan *gelling agent* yang paling baik dan aktivitas daya hambat pasta gigi yang paling baik terhadap bakteri *Streptococcus mutans*.

Literatur didapat dari jurnal publikasi nasional maupun internasional yang diperoleh dari penyedia jurnal di internet serta dari buku maupun e-book, pencarian jurnal penelitian yang dipublikasikan di internet menggunakan search engine ProQuest, PubMed, Research Gate, SagePub dan Google Schoolar.

Berdasarkan review studi literatur diperoleh hasil pasta gigi yang baik berdasarkan vsikositas dan daya sebarnya, diurutkan sebagai berikut yaitu pasta gigi minyak kayu manis dengan penambahan Na-CMC, kemudian pasta gigi minyak kayu manis dengan penambahan karbopol, pasta gigi kayu siwak dengan gelling agent carbopol 940, dan pasta gigi minyak kayu manis dengan penambahan HPMC, Hasil daya hambat yang baik berdasarkan studi literatur diperoleh pada pasta gigi kayu siwak dengan hasil daya hambat sebesar 19,25 ± 11,82 mm.

Kata kunci : kulit batang kayu manis, karies gigi, pasta gigi, *Streptococcus mutans*

ABSTRACT

ARIMURNI 2020,REVIEW FORMULATION OF CINNAMON (*Cinnammomum burmannii)* AND MISWAK (*Salvadora persica*) WITH VARIOUS GELLING AGENTS AS ANTIBACTERIAL IN *Streptococcus mutans*. FACULTY OF PHARMACEUTICALS, UNIVERSITY SETIA BUDI, SURAKARTA.

Dental caries becomes the main issue of the dentals problem most of the patients are children. One of the plants that contains antibacteria activity is cinnamomum (Cinnammomum burmanii BI.). This study aims to determine the physcal quality including homogeneity, organoleptic, viscosity, ph, dispersion area, foam height, and stability of the ethanol extract of cinnammomum (Cinnammomum burmannii BI.) and the test of the antibacterial activity against bacteria *Streptococcus mutans* by diffusion method.

Literature is obtained from national and international publications journals obtained from journal providers on the internet as well as from books and e-books, research research journals published on the internet using the search engines ProQuest, PubMed, Research Gate, SagePub and Google Schoolar.

Known active compounds of cinnamon bark and siwak bark in the form of toothpaste with the addition of the best gelling agent based on literature review, namely cinnamon oil toothpaste with the addition of Na-CMC according to the study literature, obtained good results based on the spreadability when applied where the higher vsikositas then the power spread is higher. The best inhibitory activity of cinnamon oil toothpaste and siwak bark is siwak wood toothpaste which has inhibition based on literature review of 19.25 ± 11.82 mm.

Keywords: cinnammomum, siwak, bark, gelling agent, dental caries, toothpaste, *Streptococcus mutans*