

**LITERATURE RIVIEW: KANDUNGAN EKSTRAK SEMANGKA (*Citrullus lanatus*) TERHADAP PERUBAHAN LAJU KOROSI PADA KERANGKA GIGI TIRUAN LEPASAN LOGAM ALLOY Co-Cr**

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**ABSTRAK**

**Latar Belakang:** Logam merupakan bahan kedokteran gigi yang digunakan untuk membuat gigi tiruan sebagai pengganti gigi yang rusak, karies, atau hilang. Logam akan mengalami reaksi kimia yaitu korosi jika lama berada pada lingkungan rongga mulut yang basah. Beberapa metode dapat dilakukan untuk menghambat korosi salah satunya dengan menambahkan inhibitor korosi. Inhibitor korosi dapat terbuat dari bahan organik yaitu dengan menggunakan kulit semangka. **Tujuan:** untuk mengetahui kandungan ekstrak kulit semangka (*citrullus lanatus*) terhadap perubahan laju korosi pada kerangka gigi tiruan lepasan logam alloy Co-Cr dalam *literature riview*. **Metode:** Penelitian ini menggunakan pendekatan kepustakaan sistematis (*systematic literature riview*) yang mengambil kesimpulan dari research article yang didapatkan dari data base *sciencedirect*, *google scholar*, dan *pub med*. **Hasil:** kulit semangka memiliki kandungan senyawa kimia seperti saponin, alkaloid, hidrogen sianida, tannins, phitate, fenol, oksalat, flavonoid dan juga *lcitrullin* yang dapat menghambat laju korosi. **Kesimpulan:** Ekstrak kulit semangka kemungkinan berpengaruh dalam menghambat laju korosi logam Alloy Co-Cr pada kerangka gigi tiruan lepasan karena ekstrak kulit semangka memiliki kandungan senyawa kimia khususnya tanin, alkaloid, flavonoid, dan senyawa *lcitrullin* yang dapat menghambat laju korosi logam alloy.

**Kata kunci:** Kulit semangka, Inhibitor korosi, Logam alloy Co-Cr

**LITERATURE RIVIEW: CONTENT OF WATERMELON (*Citrullus lanatus*)  
EXTRACT TO CORROSION ADVANCED IN THE DENTAL FRAMEWORK  
ALLOY CO-Cr**

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**ABSTRACT**

**Background:** Metal is a dental material used to make dentures to replace damaged, caries, or missing teeth. Metals will experience a chemical reaction, namely corrosion if they are in a wet environment for a long time. Several methods can be used to inhibit corrosion, one of which is by adding a corrosion inhibitor. Corrosion inhibitors can be made from organic materials using watermelon rind. **Purpose:** the effect of the content of watermelon (*Citrullus lanatus*) rind extract against changes in the rate of corrosion in the metal alloy Co-Cr removable denture framework in a literature review. **Methods:** This study uses a systematic literature approach (systematic literature review) which is taken from research articles obtained from the sciencedirect data base, google scholar, and pub med. **Result:** watermelon peel contains chemical compounds such as saponins, alkaloids, hydrogen cyanide, tannins, phitrate, phenols, oxalates, flavonoids and also lcitrullin which inhibits the corrosion rate. **Conclusion:** Semangaka peel extract has an effect in inhibiting the corrosion rate of Co-Cr alloy on removable denture frames because watermelon skin extract contains chemical compounds, especially tannins, alkaloids, flavonoids, and lcitrullin compounds which can inhibit the corrosion rate of metal alloys.

**Keywords:** Watermelon skin, Inhibitor corrosion, Co-Cr metal alloys