

# Pengaruh Lama Perendaman Gigi Sapi di Dalam Larutan Ekstrak Kelopak Bunga Rosela Terhadap Kekerasan Email = Effect of Immersion in Roselle Extract Solution on Hardness of Bovine Enamel

Dame, Margaretha Taruli, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20368281&lokasi=lokal>

---

## Abstrak

Penelitian ini dilakukan untuk mengamati perubahan kekerasan email gigi sapi setelah direndam dalam larutan ekstrak kelopak bunga rosela. Sepuluh buah spesimen gigi sapi direndam selama 15, dilanjutkan sampai menit ke 30, 45 dan akhirnya 60. Pada permukaan email dilakukan uji kekerasan dan pengamatan secara mikroskopis. Kekerasan email gigi sapi sebelum perendaman adalah 328 KHN dan setelah perendaman 15 sampai 60 menit menurun berturut-turut menjadi 57,4 KHN dan 11 KHN. Disimpulkan, terjadi penurunan kekerasan email yang signifikan ( $p < 0,05$ ). Gambar SEM memperlihatkan perubahan prisma email setelah perendaman sampai dengan 60 menit.

.....Organic acid contained in roselle calyx are capable of causing acidic condition on oral cavity. The aim of the present study was to analyse the effect of immersion in roselle extract solution on hardness of bovine enamel. Ten specimen of bovine tooth were immersed in roselle extract solution up to 60 minutes. Bovine enamel surface was characterized in hardness and in microscopy. Result showed hardness value before immersion was 328 KHN while after immersion for 15 minutes up to 60 minutes was 57,4 KHN and 11 KHN. In conclusion, hardness of bovine enamel was significantly decrease ( $p < 0,05$ ). SEM revealed changes of enamel rod after immersion up to 60 minutes.