

Scale Up Produksi Propolis cair Indonesia dari bahan baku raw propolis dan sarang lebah hutan dengan bubbling vacuum evaporator = Scale up production Indonesian liquid propolis from raw propolis and wild beehive using bubbling vacuum evaporator

Andhika Akhmariadi, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20313803&lokasi=lokal>

Abstrak

ABSTRAK

Proses produksi propolis pada skala laboratorium menggunakan alat rotary evaporator dengan kapasitas satu liter ekstrak etanol propolis ditambah media pelarut gliserol. Etanol dievaporasi pada suhu 65°C dan dikurangi kandungan airnya pada suhu 80°C. Agar kuantitas produksi bisa meningkat, dilakukan pengembangan dengan cara memperbesar daya tampung ekstrak etanol propolis dan media pelarut saat evaporasi menjadi 12 liter serta memodifikasi sistem rotary dengan sistem bubbling (bubbling vacuum evaporator). Hasilnya dari 8,02 kg raw propolis dihasilkan 10,85 liter dengan kandungan total flavonoid rata-rata sebesar 914,8 mg/l, sedangkan dari 8,04 kg bahan baku sarang lebah hutan dihasilkan sebanyak 7,65 liter dengan kandungan total flavonoid rata-rata sebesar 307,1970 mg/l. Kapasitas produksi rata-rata mencapai satu liter per hari. Produk yang dihasilkan secara organoleptik terasa manis, tidak berbau khas air liur dan berwarna coklat.

ABSTRACT

The process of production propolis on laboratory scale using rotary evaporator with capacity one liter of ethanol extract propolis include propylene glycol as solvent medium. Ethanol is evaporated at temperature of 65°C and reduced water content at 80°C. In order for the quantity of products can be increased, made the development of by increase the capacity of the ethanol extract of propolis and the medium while solvent evaporation to 12 liters and modify rotary system with a bubbling system (bubbling vacuum evaporator). Then the solvent medium used was replaced with glycerol. The result of 8.02 kg of raw propolis produced 10.85 liters with the average of total flavonoid content 914.8 mg/l, while for 8 kg of raw material forest beehive produced 7.65 liters with the average of total flavonoid content 307.2 mg/l. With the capacity production average reaches one liter per day. The resulting product by organoleptically sweet taste, no smell and distinctive of saliva and the colour of product is brown.