

TEKNIK EKSTRAKSI OLEORESIN DARI BERBAGAI JENIS CABAI (Oleoresin Extraction Technique from Many Tipe of Chili)

Chilwan Pandji, Endang Warsiki, Rini Purnawati, Laras Wahyu
Dep. Teknologi Industri Pertanian, Fakultas Teknologi Pertanian, IPB

ABSTRAK

Cabai memiliki berbagai kandungan yang berguna bagi manusia. Zat aktif pada cabai disebut capsaicin. Zat ini yang berperan utama dalam memberi rasa pedas pada cabai. Dalam penelitian ini oleoresin cabai diekstrak dari tiga jenis cabai dengan tiga perlakuan pencucian. Jenis cabai yang digunakan adalah cabai merah, keriting, dan rawit dengan perlakuan perulangan pencucian sebanyak satu, dua, dan tiga kali. Cabai segar dicuci dan dikeringkan sampai mencapai kadar air 8–10%. Cabai kering kemudian diblender dan diayak dengan ukuran 50 mesh. Sebanyak 100 gram cabai bubuk ditambahkan kedalam pelarut etanol 96% dengan perbandingan bubuk cabai dan etanol dalam berat per volume (b/v) sebesar 1:5. Ekstraksi dilakukan dengan metode maserasi berpengaduk dengan kecepatan pengadukan 700 rpm pada suhu 50°C selama 4 jam. Analisis dilakukan untuk menguji mutu oleoresin cabai yang meliputi rendemen, kadar sisa pelarut dan nilai warna. Hasil penelitan menunjukkan bahwa interaksi antara jenis cabai dan jumlah perulangan pencucian tidak berpengaruh nyata terhadap hasil yang diperoleh. Namun demikian cabai rawit menghasilkan rendemen tinggi dibandingkan dengan jenis cabe lain. Nilai warna dan kadar sisa pelarut oleoresin dari ketiga jenis cabe belum sesuai dengan ketentuan EOA (*Essential Oil Association*).

Kata kunci: Cabai, ekstraksi, pencucian, oleoresin.

ABSTRACT

The chili has a variety of content that is very useful for human being. The active substance in chili peppers is called capsaicin. This substance is the main substance in giving a sense of spicity. In this research, oleoresin of chili was extracted from three types of chili with three treatments of solvent cycle of washing. The chillies were red chili, curly chili, and cayenne pepper with once, twice and and three times of solvent washing. Fresh chili was washed then dried to achieve moisture content of 8–10%. Dried chili was grounded and sieved in a mesh of 50. Chili extraction was done by 96% ethanol. A total of 100 grams of material was added into ethanol with a ratio between chili and etanol in weight per volume (w/v) of 1:5. Extraction was done by maceration method and stirred with a stirring speed of 700 rpm at temperature of 50°C, for 4 hours. Analysis was conducted to quality testing of chilli oleoresin including yield, solvent residual, and color values. The results showed that the interaction between types of chili and the cycles of washing had no significantly effect of the quality of the oleoresin. Among them, cayyene paper had the highest level of yield however color value and solvent residue of all kind of chili has not yet met EOA (*Essential Oil Association*) requirements.

Keywords: Chilli, extraction, washing, oleoresin.