

ABSTRAK

Telah dilakukan penelitian perbandingan besar ukuran partikel dan persen berat zeolit terhadap pemucatan CPO (Crude Palm Oil). Zeolit di ambil dari daerah Sarulla, Kec.Pahae Jae. Perbandingan besar ukuran partikel zeolit yakni 80 mesh, 100 mesh, dan 120 mesh. Sedangkan persen berat yakni 10 %, 20 %, dan 30 %. Pemucatan dilakukan guna membandingkan dan mengetahui daya serap masing-masing zeolit terhadap β karoten pada CPO (Crude Palm Oil). Aktivasi zeolit dilakukan dengan pengasaman menggunakan H_2SO_4 4 N pada suhu $100^\circ C$. Hasil yang diperoleh bahwa zeolit ukuran partikel 120 mesh, dengan berat 30%, mampu menyerap β karoten sampai (98,53%) dan zeolit ukuran partikel 80 mesh dengan bobot 10 % mampu menyerap β karoten sampai (93,08%). Dapat disimpulkan bahwa semakin kecil ukuran partikel dan semakin tinggi bobot zeolit, semakin besar pula daya serapnya terhadap β karoten.

ABSTRACT

Research of particle size and zeolites gravity percentage ratio has been done due to the bleaching of CPO (Crude Palm Oil). Zeolites was taken from Sarulla, Kec.Pahae Jae. The ratio of zeolites particle size are 80 mesh, 100 mesh, and 120 mesh, whereas the gravity percentage are 10%, 20%, and 30%. The bleaching has been done to compare the absorbing power of each zeolites due to β carotene in CPO (Crude Palm Oil). Activated zeolites has been done with heating using H_2SO_4 at temperature $100^\circ C$. The results which obtained that 120 mesh zeolites particle size, 30% gravity percentage, able absorbed β carotene until 98,53%, and 80 mesh, 10% gravity percentage able absorbed β carotene until 93,08%. And can be concluded that smaller-and more zeolites particle size, and higher gravity percentage, the absorbing power increases due to the β carotene.