Active Charcoal Utilization of Snake Fruit Seeds (Salacca Zalacca) as Adsorbent to Purification Cooking Oil

Siti Farida^{1,a*}, Kristina Tresia Leto^{2,a}, Kartini Rahman Nisa^{3,a}

^aDepartment of Chemical education, IKIP Muhammadiyah Maumere Jl. Jendral Sudirman, Waioti – Maumere – Nusa Tenggara Timur 86113

*sitifarida924@gmail.com, ²artinleuhoe@gmail.com, ³kartinirahmannisa@gmail.com

Abstract. The study aims to determined the ability of charcoal snake fruit seeds to adsorb cooking oil and free acid levels of the purified oil. The oil used in this study is packaged cooking oil which is used to fry foodstuffs from fish until 7th frying pan. The oil is purified using activated charcoal from snake fruit seeds. Testing carried out is the test of organoleptic and free fatty acid test (FFA) by looking at the op-timum contact time and optimum dose. The results showed that the level of acti-vated charcoal and the most effective contact time in reducing free fatty acid lev-els and color clarification in used cooking oil was 1.5 gram of activated charcoal with a contact time of 90 minutes, with a percentage reduction of 78%.

Keyword: snake seed charcoal, adsorbent, cooking oil, free fatty acid.