

Improving lapohan clay bodies formulation to produce traditional pottery in Pulau Selakan Semporna

ABSTRACT

This research explores local traditional clay pottery (Lapohan) using triangulation formula for characterization of clay body in plasticity and colour clay body change (Fe_2O_3). In this research, 21 formulations using plasticity (Lapohan clay) and non-plasticity ($\text{Al}_2(\text{OH})_4\text{Si}_2\text{O}_5$) material were selected and used as control factors in the experiment design at various cone firing temperatures ranged from 792°C to 1186°C . The effects of the heat on the colour formation were quantitatively measured, and the relationship between the mechanical resistance and the colour components of the Lapohan pottery was analyzed. The color change and proper temperature of the firing sample were evaluated in terms of each sample. The result shows that the higher percentages of non-plasticity or kaolin give reduce redness of red iron content and higher high temperature firing with less plasticity. The relevant information for the study will be gathered from the descriptive method of qualitative research, including observation and in-depth interview for written or visual data collection. The finding of the study shows that traditional pottery production in Pulau Selakan is principally understanding and technical use of clay as a primary material, clay bodies preparation and adjustment for potters using local natural clay.