PEMBUATAN SEL SURYA TERSENSITASI ZAT WARNA MENGGUNAKAN EKSTRAK KELOPAK BUNGA ROSELLA *(Hibiscus sabdariffa)* DAN KULIT MANGGIS *(Garcinia manggostana)*

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ABSTRACT

The roselle flower and mangosteen pericarp dyes were applied as dye sensitizer for dye-sensitized solar cell. The solar cell was composed of a thin film TiO_2 as working electrode, 2B pencil as controle electrode, and I^-/I_3^- as electrode couple. The influence of dipping time of working electrode in dyes extract on the cell efficiency was investigated. The highest efficiency of roselle and mangosteen dye-sensitized solar cells was obtained at 60-minutes dipping, respectively as 0.017% and 0.032%. Characterization of both dyes extract by UV-Vis Spectrophotometry method showed that dyes adsorb in visible region.

Keywords: *Solar cell, sensitized, dyes, antosianin, TiO_2*

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