

**DYEING AND APPLICATION OF NATURAL
FRAGRANCE USING CITRUS PLANT COMPONENT
ON COTTON FABRIC**

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ABSTRACT

The synthetic dyes give threats to environment especially the wastewater from dyeing process which contains chemical that harm the environment although it gives good colourfastness on fabric and cheaper in price. The use of natural dyes give advantages to human health and environment such as non-allergic, non-carcinogenic, non-harmful and give soft shades of colour on the fabric. Natural dyes from Calamondin peels were applied on cotton fabric to determine the colourfastness properties and fragrance from kaffir scent on the cotton fabric. The method used for extraction was done using aqueous method. The fresh calamondin peels and kaffir lime leaves were collected, washed, grounded into fine paste with water with Liquor ratio, 1:100 of paste and water. The treatment methods of Meta-Mordanting and Without-Mordanting were carried out during the dyeing process by using tamarind seed coats and calamondin juice as mordants. The dyed fabrics were based evaluated on depth of shade, colourfastness to washing, perspiration and rubbing/crocking on the fabric and also odour evaluation. The results showed that in general, the used of tamarind seed coats as natural mordant gave the best results in colourfastness to washing, perspiration and rubbing/crocking tests. Majority of respondents found that no scent and slightly scent left for fabric dyed without mordant and some respondents indicated that mild and strong scent were present in the fabric. These findings were unexplainable although precautions were made when handling the samples for each cycle. The fabric dyed with calamondin juice and tamarind seed coats as mordants still retained mild scent on the fabrics after five washing cycles.

KEYWORDS: Natural dye, calamondin, kaffir leaves, tamarind seed coats, colourfastness

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