

**EFFECT OF LIGHT INTENSITY ON GROWTH AND
DEVELOPMENT AND FRAGRANCE PRODUCTION IN**

Ocimum tenuiflorum

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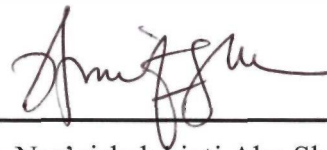
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ABSTRACT

EFFECT OF LIGHT INTENSITY ON GROWTH AND DEVELOPMENT AND FRAGRANCE PRODUCTION IN *Ocimum tenuiflorum*

Ocimum tenuiflorum is a member of basil family which has importance in medicinal and fragrance production industry. The aim of this study is to observe the effect of light intensity on the growth and development and fragrance production in *Ocimum tenuiflorum* plants. A total of hundred and thirty five plants of *Ocimum tenuiflorum* were grown in three places of 0% light shades, 50% light shades and 70% light shades to observe the difference in their growth and development. The light intensity did affect the growth and development of *Ocimum tenuiflorum*. The plants grown under the 0% of light shades have higher height, number of leaves and chlorophyll content compared to the other two places. The hydrodistillation method was used to extract the plant and thin-layer chromatography has been used to identify the existence of the compounds. Two of the major compound of basil plant which their productions are affected by light intensity is linalool and eugenol.