

**EFFECT OF DIFFERENT ORGANIC MULCH ON THE
QUALITY OF *Solanum melongena* L.**

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DECLARATION

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ABSTRACT

EFFECT OF DIFFERENT ORGANIC MULCH ON THE QUALITY OF *Solanum melongena* L.

In organic farming weeds are most common problems that farmers need to face. There are several studies shown on used organic mulches to control weed in brinjal (*Solanum melongena* L.) but there still limited sources of research. This study aims to compare the effectiveness of different types of organic mulch on weeds and its effect on quality of *Solanum melongena* L. Then, a total five treatments use as mulches in brinjal as follows: (T1) coconut fibre, (T2) paddy straw, (T3) coconut fronds (T4) negative control and (T5) positive control. The assessment was carried out based on assessing weed, population weed weight, density, number of fruits, fruit weight and fruit size for 28 weeks. Weed density were evaluated every month by using quadrat meanwhile weed weight, number of fruits, fruit weight and fruit size were evaluated after harvest activity. This research was identified 11 weed species in research plot. *E. indica* are dominant species because had highest importance value (IV) in cultivation of brinjal. Coconut fibre significantly higher in number of fruits, size of fruits and yield of brinjal. In contrast, brinjal with no mulch had lowest quality because of the presence of weeds. This study revealed organic mulch are effective on quality of brinjal. Besides being environmentally friendly, the use of coconut fibre as organic mulches should be promoted in agriculture sector Malaysia because it can achieve to zero-waste concept which can keep environment safe and clean. Future research is needed to examine the effect of organic mulches on quality of *S. melongena* L. and control weeds because of limitations of study. I would recommend to examine the effectiveness of organic mulches in controlling weeds and quality of *S. melongena* L.

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