

**EFFECT OF DEFOLIATION PERCENTAGE ON CORN (*Zea mays L.*)
PRODUCTION**

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ABSTRACT

The technique that can be used to increase the production of corn plants is to cut off the parts of the plant that are no longer actively carrying out photosynthesis. Defoliation is expected to reduce the number of plant parts, such as leaves and others, so that the vegetative growth of plants can be balanced with their reproductive growth. This study aims to examine the effect of defoliation on maize production. This research was conducted in October 2022 - January 2023 on the land of the Tegalgede Village, Jember Regency, East Java. This study was arranged using a non-factorial Randomized Block Design (RBD) consisting of 6 treatments and 4 replications. The defoliation treatment included: without defoliation, 50% of the upper leaves, 50% of the upper leaves, 50% of the lower leaves, 100% of the lower leaves, 50% of the upper leaves + 50% of the lower leaves. The results showed that the 50% defoliation treatment under corn cobs was significantly different in fresh cob weight per sample (128.85 g/plant) and cob diameter (3.68 cm.). Defoliation of old leaves (under the cob) can increase photosynthate translocation to fruit parts because the lower leaves are no longer active for photosynthesis and become another sink if not pruned.

Keywords: *Defoliation, Maize, Growth balance, Photosynthetic translocation*