

## **ABSTRACT**

### **EFFECT OF A COMBINATION OF DROUGHT STRESS AND AVOCADO PEEL EXTRACT ANTIOXIDANT ON VEGETATIVE GROWTH OF SWEET CORN (*Zea mays saccharata* Sturt.)**

**By:**  
**Ismi Azizah Nuriyah**  
**NPM 185001076**

**Supervisor:**  
**Maman Suryaman**  
**Elya Hartini**

The benefits and nutritional value of sweet corn causing its necessity increased. One of the efforts to increased sweet corn production is by using dry land that has not been utilized. Drought stress is the main factor that limits plant growth and development and affects plant productivity. Avocado peel extract known have a high content of antioxidant which play a role to overcome drought stress condition. This study aims to determine the effect of a combination of drought stress and avocado peel extract antioxidants on sweet corn vegetative grown. The study was conducted on April until July 2022 at the Laboratory and Experimental Garden Faculty of Agriculture, Siliwangi University using an experimental method with a randomized block design (RBD) consisting of 9 combination treatments and repeated 3 times. The combinations tried were as follows: A = 100% field capacity + water (control), B = 50% field capacity + water (control), C = 25% field capacity + water (control), D = 100% field capacity + 2% avocado peel extract, E = 50% field capacity + 2% avocado peel extract, F = 25% field capacity + 2% avocado peel extract, G = 100% field capacity + 4% avocado peel extract, H = 50% field capacity + 4% avocado peel extract, I = 25% field capacity + 4% avocado peel extract. The result showed that field capacity and avocado peel extract had an effect on plant height, number of leaves and root lenght. 100% field capacity + 4% avocado peel extract had the best effect on plant height, number of leaves, and root lenght of sweet corn plants.

Keywords : Antioxidants, drought stress, avocado peel extract, sweet corn.