

**Growth and Production Response Of Tobacco (*Nicotiana tabacum* L.) Na-Oogst To The Administration Of Amino Acid POC**  
Nisa Budi Arifiana, S. ST., MP.

**Danu Arengga**  
Crop Cultivation Study Program  
Plantation Department of Agricultural Production

**ABSTRACT**

*Tobacco is an important commodity that provides economic and social benefits to the wider community. Na-Oogst tobacco, is a cultivated variety planted at the end of the dry season and harvested at the beginning of the rainy season. To maintain plant production and quality, optimal maintenance is required through fertilization aimed at improving soil fertility by adding macro and micro nutrients. Efforts to increase productivity can be done by providing organic materials such as amino acids that help plants be more resistant to environmental stress, increase nutrient absorption efficiency, and support the process of photosynthesis by increasing chlorophyll production. The research conducted at Jember State Polytechnic from September to November used a non-factorial Randomized Block Design (RAK) with four treatment levels, namely P0: No Treatment (Control), P1: Amino Acid Application 8ml, P2: Amino Acid Application 10ml, and P3: Amino Acid Application 12ml. To determine the effect of amino acid POC on the growth and production of tobacco plants. The results of the study showed that the application of amino acid POC in various concentrations did not have a significant effect on the growth and yield parameters of tobacco plants, including stem diameter, plant height, number of leaves, leaf length and width, chlorophyll content, leaf weight, and plant productivity levels.*

**Keywords:** Na-Oogst Tobacco, Amino Acids