## Efficiency of Apical Prunning and Gibberellin Application on the Growth and Yield of Soybean Plants (*Glycine max* L.) Dega 1 Variety Supervised by Ilham Muhklisin, S.ST., M.Sc.

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## ABSTRACT

The use of gibberellins in apical pruning is thought to increase the development of lateral branches of soybean plants to increase crop production. This research aims to examine plant apical pruning and the application of gibberellin to the growth and yield of the Dega-1 soybean variety. This research was carried out in October-December 2023 in Antirogo Village, Sumbersari District, Jember Regency. The research was designed using a randomized block design with two factors. The first factor was the shoot pruning node consisting of Control (without pruning), apical pruning on 1st node of the shoot, and apical pruning to the 2nd node of the shoot. The second factor is the gibberellin concentration: control (without gibberellin), 200 ppm, and 300 ppm. The research results show that Apical pruning to the 2nd node of the shoot produces the highest number on the productive branch (6.60 branches), number of leaves (44.02 leaves), number of productive nodes (10.86 nodes), number of pods per sample (21.57 pods), number of pods per plot (446.56 pods), pod weight per sample (18.99 grams), pod weight per plot (404.56 grams), and the dry weight of the stover (23.67 grams). Furthermore, pruning treatment apical and gibberellin administration had no interaction on all parameters observation.

Keywords : Apical Pruning, Hormone, Plant Growth Regulator, Soybean