Pengaruh Umur Pemangkasan Pucuk Dan Konsentrasi Ethepon Terhadap Prduksi Dan Mutu Benih Mentimun (*Cucumis sativus* L.) Stock Seed. (*Effect Of Topping Age And Ethephon Concentration On Production And Quality Of Cucumber* (*Cucumis sativus* L.) Stock Seeds Dibimbing oleh **Netty Ermawati, SP,Ph.D**

Ahmad Rofiq Ariswandi
Study Program of Seed Production Technique
Departement of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

Cucumber (Cucumis sativus L.) is an annual plant with a climbing or vining growth habit, while some cultivars exhibit a bushy growth form. The root system of the plant is broad but shallow. However, several problems arise in cucumber production, one of which is the insufficient availability of cucumber seeds, resulting in unstable cucumber production. This study aimed to investigate the effect of the age of shoot pruning and ethephon concentration on cucumber seed production and quality (Cucumis sativus L.) stock seed. The research was conducted using a factorial randomized block design (RBD) with two treatment factors: shoot pruning age (14, 21, and 28 days after planting) and ethepon concentration (0 ppm, 100 ppm, 200 ppm, 300 ppm). The observed parameters included the number of lateral branches, flowering speed, number of set fruits, fruit weight per fruit, number of viable seeds per plant, seed weight per plant, production per hectare, 1000-seed weight, germination rate, growth speed, growth synchrony, and moisture content. The results showed that both the age of shoot pruning and ethephon concentration affected several parameters. The best treatment combination was obtained with pruning at 28 days after planting and 200 ppm ethephon, resulting in the highest seed production. This research is expected to serve as a reference for cultivation practices aimed at achieving optimal seed quality and productivity.

Keywords: *Cucumber Seed Quality, Shoot Pruning Age, Ethephon Concentration*