

**Pengaruh Dosis Pupuk Boron dan Interval Waktu Pemupukan NPK Terhadap Produksi dan Mutu Benih Kenikir (*Cosmos sulphureus*)** (*Effect of Boron Fertilizer Dosage and Time Interval of NPK Fertilization on the Production and Quality of Kenikir (*Cosmos sulphureus*) Seeds*) Supervised by : Maria 'Azizah, S.P., M.Si.

**Mohammad Faiz Mauladana**  
**Study Program Seed Production Technique**  
**Majoring of Agricultural Production**  
Program Studi Teknik Produksi Benih  
Jurusan Produksi Pertanian

### ***ABSTRACT***

*The kenikir plant (*Cosmos sulphureus*.) is a vegetable plant that has popular potential and is often grown in various countries, including Indonesia. The problem in seed multiplication of kenikir plants is that there is no specific standard operating procedure regarding seed production and seed quality of kenikir plants. Therefore, this research aims to find the best effect of NPK fertilization dosage and timing to increase the production and quality of kenikir seeds. This research was conducted at Jl. Tawangmangu, Tegal gede village, Summersari sub-district, Jember regency, East Java province. East Java, with an altitude of 80-100 masl. using Factorial Randomized Complete Block Design (RCBD) consisting of 2 factors. The first factor was the dose of boron fertilizer (B) consisting of 0 kg/ha (B0), 1 kg/ha, and 2 kg/ha. The second factor was the time of fertilization (W) consisting of 3,4,5,6 WAP (W1) and 3,5 WAP (W2) levels repeated 4 times. The results showed that the treatment of boron fertilizer dose of 2 kg/ha showed significantly different on the parameter of the number of flowers per plant of 50.92 florets, and significantly different on the parameter of the number of seeds per plant of 22.00 grams, seed weight per plant of 3.23 grams, potential production per hectare of 161.06 kg/ha, germination of 81.5%. The best results of the boron fertilizer dose study gave the effect of increasing the number of flowers per plant at a dose of 2 kg/ha.*

**Key words** : Kenikir, boron fertilizer dosage, NPK fertilization time interval, seed production