

# **RESPON PERTUMBUHAN DAN HASIL TANAMAN TERUNG UNGU (*Solanum melongena* L.) PADA APLIKASI DOSIS FOSFOR DAN KONSENTRASI GIBERELIN**

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## **ABSTRAK**

Terung merupakan salah satu komoditas sayuran penting bagi masyarakat Indonesia. Penelitian bertujuan untuk mengetahui pengaruh dosis fosfor, konsentrasi giberelin serta interaksinya terhadap pertumbuhan dan hasil tanaman terung ungu. Penelitian dilaksanakan di Tirtomartani, Kalasan, Sleman, Yogyakarta pada Desember 2025–Maret 2026. Metode penelitian Faktorial  $(3 \times 3) + 1$ , disusun dengan RAKL. Faktor pertama adalah dosis fosfor yaitu 180 kg/ha, 240 kg/ha, dan 300 kg/ha. Faktor kedua adalah konsentrasi giberelin yaitu 150 ppm, 200 ppm, dan 250 ppm. Data dianalisis menggunakan sidik ragam ANOVA taraf 5% dan uji kontras orthogonal lalu diuji lanjut dengan DMRT taraf 5%. Hasil penelitian menunjukkan kombinasi perlakuan berinteraksi pada parameter umur berbunga, panjang buah, diameter buah, bobot buah per buah dan bobot buah per tanaman. Perlakuan dosis fosfor 300 kg/ha memberikan hasil paling baik pada parameter Tinggi Tanaman 20,25,30 HST, Luas Daun 35 HST, Rasio Tajuk/Akar 25 HST, Umur Berbunga, dan Jumlah Buah per Tanaman. Perlakuan konsentrasi giberelin 200 ppm memberikan hasil lebih baik pada parameter Tinggi Tanaman 30 HST, Luas Daun 35 HST, Bobot Kering Tajuk 25,30, dan 35 HST, Umur Berbunga, Panjang Buah, Diameter Buah, Jumlah Buah per Tanaman, Bobot Buah per Buah, Bobot Buah per Tanaman, Bobot Buah per Petak Unit Percobaan dan Bobot Buah per Hektar.

**Kata Kunci:** *Terung Ungu, Fosfor, Giberelin.*

# **GROWTH AND YIELD RESPONSE OF PURPLE EGGPLANT (*Solanum melongena* L.) ON THE APPLICATION DOSES OF PHOSPHORUS AND GIBBERELLIN CONCENTRATIONS**

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## **ABSTRACT**

Eggplant is one of the most important vegetable crops for the people of Indonesia. The study aimed to determine the effects of phosphorus application rates, gibberellin concentrations, and their interactions on the growth and yield of purple eggplant. The study was conducted in Tirtomartani, Kalasan, Sleman, Yogyakarta from December 2025 to March 2026. A 3×3+1 factorial design was used, arranged in a randomized block design (RAKL). The first factor was phosphorus dose: 180 kg/ha, 240 kg/ha, and 300 kg/ha. The second factor was gibberellin concentration: 150 ppm, 200 ppm, and 250 ppm. Data were analyzed using ANOVA at the 5% level and orthogonal contrast tests, followed by DMRT at the 5% level. The results of the study showed that treatment combinations interacted on the parameters of flowering age, fruit length, fruit diameter, fruit weight per fruit, and fruit weight per plant. The phosphorus dose treatment of 300 kg/ha yielded the best results for the parameters Plant Height at 20, 25, and 30 DAP, Leaf Area at 35 DAP, Crown-to-Root Ratio at 25 DAP, Flowering Age, and Number of Fruits per Plant. The gibberellin concentration treatment of 200 ppm yielded better results for the parameters of Plant Height at 30 DAP, Leaf Area at 35 DAP, Dry Weight of Canopy at 25, 30, and 35 DAP, Flowering Age, Fruit Length, Fruit Diameter, Number of Fruits per Plant, Fruit Weight per Fruit, Fruit Weight per Plant, Fruit Weight per Experimental Plot, and Fruit Weight per Hectare.

**Keywords:** *Eggplant, Phosphorus, Gibberellin.*