ABSTRAK

PENGARUH CEKAMAN SALINITAS PADA PERKECAMBAHAN BENIH BEBERAPA VARIETAS SORGUM (*Sorghum bicolor* [L.] Moench)

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Sorgum (*Sorghum bicolor* [L.] Moench) merupakan tanaman serealia yang memiliki potensi untuk dikembangkan sebagai sumber pangan, pakan, dan bahan baku industri. Beberapa varietas unggul sorgum seperti, Numbu, Samurai 2, dan Suri dapat berproduksi tinggi, tetapi tidak dinyatakan ketahananya terhadap cekaman salinitas. Apakah ketiga varietas sorgum memiliki ketahanan yang sama terhadap salinitas. Penelitian ini bertujuan untuk mengetahui pengaruh taraf salinitas pada perkecambahan tiga varietas sorgum (*Sorghum bicolor* [L.] Moench). Penelitian dua faktor dengan konsentrasi larutan garam NaCl 0%, 0,25%, 0,5%, 0,75%, dan 1% diterapkan untuk pengecekan benih tiga varietas sorgum tersebut, dan diulang 5 kali dalam 5 blok. Respon perkecambahan pada salinitas diamati pada kecepatan perkecambahan (KP), persentase kecambah normal total (PKNT), persentase kecambah abnormal (PAKN), persentase benih tidak berkecambah (PBTB), bobot kering kecambah normal (BKKN), persentase kecambah normal kuat (PKNK), persentase kecambah normal lemah (PKNL), panjang tajuk kecambah normal (PTKN), panjang akar kecambah normal (PAKN). Hasil penelitian menunjukan bahwa cekaman salinitas menurunkan perkecambahan benih tiga varieta sorgum. Varietas Samurai lebih tahan terhadap cekaman salinitas dibandingkan dengan varietas Numbu dan Suri.

Kata kunci: Salinitas, NaCl, perkecambahan, varietas sorgum

ABSTRAK

***EFFECT OF SALINITY STRESS ON SEED GERMINATION OF SEVERAL SORGHUM* (*Sorghum bicolor* [L.] Moench)**

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Sorgum (*Sorghum bicolor* [L.] Moench) is a cereal crop with great potential to be developed as a source of food, feed, and industrial raw materials. Several superior sorgum varieties such as Numbu, Samurai 2, and Suri can produce high yields, but their tolerance to salinity stress has not been determined. Do the three sorgum varieties have the same tolerance to salinity? This study aims to determine the effect of salinity levels on the germination of three sorgum varieties (*Sorghum bicolor* [L.] Moench). A two-factor experiment with NaCl salt solution concentrations of 0%, 0.25%, 0.5%, 0.75%, and 1% was applied for seed testing of the three sorgum varieties, and it was repeated 5 times in 5 blocks. Germination response to salinity was observed in germination speed (KP), total percentage of normal seedlings (PKNT), percentage of abnormal seedlings (PAKN), percentage of non-germinated seeds (PBTB), dry weight of normal seedlings (BKKN), percentage ofstrong normal seedlings (PKNK), percentage of weak normal seedlings (PKNL), shoot lengthof normal seedlings (PTKN), and root length of normal seedlings (PAKN). The results of the study show that salinity stress reduces seed germination in three sorghum varieties. The Samurai variety is more tolerant to salinity stress compared to the Numbu and Suri varieties.

Keywords: Salinity, NaCl, germination, sorghum varieties