

## Intisari

Penelitian ini bertujuan untuk mengetahui pengaruh tingkat salinitas terhadap pertumbuhan bibit padi dan mengetahui respon perkecambahan benih padi dalam cekaman salinitas pada kondisi lembab dan tergenang. Penelitian ini dilaksanakan di Rumah Kaca, Fakultas Pertanian, Universitas Gadjah Mada, Yogyakarta. Penelitian dilaksanakan dengan rancangan percobaan *Split Plot* dengan *main plot* pengaruh ketersediaan air dengan 2 aras (genangan dan lembab) dan *sub plot* kadar garam dengan 4 aras (0, 50, 100, dan 150 mM NaCl). Salinitas 150 mM NaCl menurunkan persentase perkecambahan, panjang plumula, panjang akar, bobot segar, dan bobot kering bibit. Kondisi lembab menurunkan panjang plumula, panjang akar, bobot segar, dan bobot kering bibit padi. Kombinasi kondisi lembab dengan salinitas 50 mM NaCl sudah menurunkan sebagian besar variabel pertumbuhan padi.

Kata kunci: padi, salinitas, genangan, lembab

### ***Abstract***

The purpose of this research was to determine the effect of salinity level on rice germination and early seedling growth in submerged and moist conditions. This research was held at the greenhouse of the Faculty of Agriculture, University Gadjah Mada, Yogyakarta. This research was designed using Split Plot. Main plot consisted of growth condition, i.e. submerged and moist conditions. Sub plot consisted of salinity level (0 mM, 50 mM, 100 mM, and 150 mM NaCl). Addition of 150 mM NaCl has inhibited germination, plumulae growth, root growth, dry and fresh weight of rice seedling. Seedling in submerged condition showed better growth than seedling in moist condition. The combination of 50 mM NaCl and moist condition inhibited most of the seedling growth variables.

Key words: rice, salinity, submerged, moist