EFFECTS OF SALT STRESS ON SOME PHYSIOLOGICAL CHARACTERS OF RICE (ORYZA SATIVA L.) IN GERMINATION AND SEEDLING STAGES

Özgür TATAR¹, Mithat Nuri GEVREK¹⊠

¹Ege University Faculty of Agriculture Department of Field Crops, Bornova-Izmir, TURKEY

ABSTRACT

Effects of salts stress on seven rice genotypes (Osmancık, Kıral, Yavuz, Demir, Baldo, IR4630, IR31785) were investigated at the seedling and germination stages. The highest reduction in dry weight was recorded for Demir and Kral while the lowest was in Yavuz. Salt treatment increased the Na⁺/K⁺ ratio in all genotypes. Germination ratio, chlorophyll and relative water content (RWC) were decreased by increasing salt levels. The genotypes showed parallel response to salt stress at the germination and seedling stage.

Key Words: Salt stress, rice, chlorophyll, sodium, potassium.