

SALT TOLERANCE OF SOME RICE VARIETIES IN SALINE SOILS WITH LOW Na/Ca AND Na/K RATIOS.

Shah Muhammed*

ABSTRACT

Increasing soil salinity delayed the flowering of IR28 and IR9764-45-2-2 but had no effect or advanced that of IR6 and KS282. The cultivar IR6 was slightly more tolerant than KS282 during the vegetative stage, while during the reproductive stage it was exactly the opposite. There was a large decrease in the absolute as well as the relative grain yield of IR28 and IR9764-45-2-2 with increasing salinity. Comparison between the shoot, straw and grain yields of IR9764-45-2-2 indicates that salt tolerance at the vegetative stage was not at all related to that at reproductive stage. Thus the evaluation of its salt tolerance, based on its growth during six weeks after transplanting may be misleading. Comparison of grain yield in this experiment with those reported earlier clearly indicates the role of Na/Ca and Na/K ratios in saline and saline-sodic soils for controlling the growth and yield of rice.