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262. THE STUDY NUTRITIONAL MANAGEMENT OF PARENT PLANT IN COMBINATION WITH SEED PRIMING BY BIOFERTILIZERS IN TOWARD TO INCREASE OF SALINITY TOLERANCE IN WHEAT CV. SAYAONZ AT GERMINATION PERIOD.

¹Fallahi, J., ²Rezvani-Moghaddam, P., ³Khajeh-Hosseini, M., ³Amiri, M.B., ⁴Aghhavani-Shajari, M., ⁴Yazdani-Biuki, R. (¹Ph. D Student in Crop Ecology, Ferdowsi University of Mashhad, Iran. Agroecology86@yahoo.com, ²Department of Crop Science, Faculty of Agriculture, Ferdowsi University of Mashhad, Iran. ³ Ph. D Student in Agroecology, Ferdowsi University of Mashhad, Iran. ⁴M. Sc. Student in Agroecology, Ferdowsi University of Mashhad, Iran.)

In order to determine the effect of priming under salinity stress condition on wheat seeds cv. Sayonz from plants were treated with nitrogen fertilizer rates (0, 55, 110, 165 N kg/ha) were obtained an experimental was conducted in 2009. Treatment consist of 3 types Biofertilizers (Nitragine, Biophosphouros and distilled water) under four levels salinity condition (0, -0.4, -0.8 and -1.2 MPa). The germination percentage, germination rate, radicle and plumule length, radicle and plumule dry weights and radicle number per seedling was measured. Results indicated that priming with biofertilizer had a positive effect on germination percentage, radicle number, radicle length and plumle length. The highest and lowest germination percentage, radicle length and plumle length was obtained by Nitragine and hydropriming treatments respectively. Also there were significant different between germination percentage by interaction seed priming and nitrogen fertilizer treatments. Salinity levels and different rates of nitrogen on all germination factors had negative effect. The highest effects of nitrogen rates on germination indexes related to 110 kg N/ha. Overall results showed that the biological fertilizer of Nitragine and middle levels of nitrogen fertilizer (55 and 110 kg N/ha) improved the germination indexes of wheat.

Keywords: Biofertilizer, Germination, Stress tolerance, Wheat

263. EFFECTS OF SEED NOURISHED BY DIFFERENT LEVELS OF NITROGEN, DIFFERENT BIOFERTILIZERS AND DROUGHT STRESS ON GERMINATION INDICES AND SEEDLING GROWTH OF WHEAT (*Triticum aestivum*) CV. SAYONZ.

¹Fallahi, J., ²Rezvani-Moghaddam, P., ²Khajeh-Hosseini, M., ³Amiri, M.B., ⁴Yazdani-Biuki, R. (¹ Ph. D Student in Crop Ecology, Ferdowsi University of Mashhad, Iran. Agroecology86@yahoo.com, ²Department of Crop Science, Faculty of Agriculture, Ferdowsi University of Mashhad, Iran. ³ Ph. D Student in Agroecology, Ferdowsi University of Mashhad, Iran. ⁴M. Sc. Student in Agroecology, Ferdowsi University of Mashhad, Iran.)

In order to study the effects of different levels of drought stress and plant growth promoting rhizobacteria on the germination indices of seeds harvested from wheat (*Triticum aestivum*) cv. Sayonz in the field treated with different levels of nitrogen, in controlled conditions, a factorial layout based on completely randomized design with three replication, was conducted. Treatments included the seeds that collected from field that received amount of 0, 120, 240 and 360 Kg/ha nitrogen fertilizer, types of biofertilizer (nitragin, biophosphouros and control) and different levels of drought stress (0, -4, -8 and -12 bar). The results showed that simple effects of levels of biofertilizers and levels of drought stress were significant on the all germination characteristics of wheat, except for mean germination time, radicle length to plumule ratio and dry weights of radicle to plumule ratio, while levels of nitrogen fertilizer only was significant on germination, germination rate and germination index. The interaction effects had showed that the seeds harvested from nitrogen fertilizer at 240 Kg/ha and drought stress 0 and -4 bar had the highest germination. Nitragin bifertilizer increased drought stress resistance compared with control, so that the stress level -4 bar reducing germination for seeds treated with biospher and non-inoculated, than plants treated with nitrajim, were 40 and 79%, respectively. Effects of three nitrogen fertilizer, biofertilizer and levels of drought stress were not significant on the characteristics measured.

Keywords: Biophosphouros, Germination, Nitragin