The Effect of Water Extract of Saffron’s Petals on Germination and Seedling Growth of Wheat (Cultivar: Azar2)

A great amount of saffron petals have been throwing out after harvesting while they possibly can be used. Therefore, the possible positive effects of water extract of saffron’s petals on germination and seedling growth of wheat (cultivar: Azar) were studied in the laboratory of dry land Agricultural Research Institute of Shirvan (North Khorasan, Iran). The effect of different concentrations of 1% water extract (0, 5, 10, 15 and 20%) on the germination of wheat, in a Completely Randomized Design with four replications of 50 seeds in Petri dishes was studied. In another experiment the effect of the same concentrations of the water extract was investigated on the length and dry weight of coleoptile and radicle in an experimental design as above. Four replicates of 10 seeds grown up between white papers (22 x 22 cm). Results showed that different concentrations of water extract have no significant effect on the final germination, coleoptiles and radicle dry weight. However, the longest coleoptile was seen in 20% and 15% and the longest radicle was observed in 20% and 15% concentrations. It seems that decrease in radicle and coleoptiles length in high concentrations without affecting their dry weight could be due to the thickness of the coleoptiles or more numbers of the radicles. Seedlings with a longer coleoptiles and radicle have the advantage to grow in the rainfed agriculture. Therefore, using 20% concentration of 1% water extract of saffron petals could possibly promote the seedling growth of wheat.
این صفحه به معنای تاییدیه نمایه سازی مقاله در پایگاه استادی سیویلیکا می‌باشد. در هر لحظه به منظور تایید اصلاح‌های این گواهی می‌توانید وضعیت ثبت مقاله را از طریق لینک فوق به صورت آنلاین کنترل نمایید.