

EFFECT OF SEEDLING AGE ON GROWTH AND YIELD OF SOME RICE CULTIVAR.

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ABSTRACT

A field experiment with two factors was carried out at the Rice Research station in Al-Mishkab during 2008 and 2009 seasons to study the effect of seedling age on growth and yield of some rice cultivars. The design was split plot with RCBD arrangement in four replicates. , cultivars (Anber33, Alyasmeien, and Alfouat1) were in the main plots, while seedlings ages (20, 27, 34, and 41) day occupied the sub plots. Statistical analysis showed that the early seedlings ages i.e.(20 and 27)day led to a significant increase in the leaf area index (LAI), dry matter (DM), crop growth rate (CGR) at different growth periods, and paddy yield (4.833 and 4.945) t.h⁻¹ in first season and (4.34 and 4.29)t.ha⁻¹ in second season compared with two late ages (34 and 41) day, However a significant reduction of net assimilation rate (NAR), relative growth rate (RGR), was found in these two early ages . Cultivars showed significant differences in most studied characters . local cultivar Anber33 gave highest values LAI, DM, CGR, and paddy yield (4.759 t.h⁻¹) in first season which never significant differences with fourat1(4.526t.ha⁻¹).It could be concluded that seedlings transplanted in the ages of (20 and 27) day which is one of the characteristics of SRI gave highest paddy yield due to the increases in the growth characteristics.

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