

The Effect of Planting Season on Relation Between Yield and Some Agronomic Traits of Rice

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SUMMARY

The experiment was to evaluate the effect of planting season on the relation of cause and effect between grain yield and other agronomic traits, and on the relative relationship between traits associated to yield. The correlation coefficients obtained in all combinations were similar in both the first and second crops, in which the correlation coefficient between filled grains per panicle and yield was the highest among studied traits, while it was negative between panicle number and yield.

Path analysis was applied to evaluate the relative importance of agronomic traits upon yield. The planting season was found to play in a different way in affecting the direct and indirect effects of the agronomic traits upon grain yield. In the first crop both the panicle number and filled grains per panicle showed the greatest magnitude of influence, followed by 1000-grain weight. Therefore, a desirable plant type was considered to be a high tillering capacity or a heavy panicle type having short stature for the first crop. On the other hand, in the second crop filled grains per panicle played a more important part for grain yield than panicle number, so a desirable plant type is supposed to be a heavy panicle type having short stature, medium-late and moderate tillering capacity.