

RESEARCH ARTICLE

Correlation and path analysis for grain yield and adaptive characters in rice under aerobic condition

■ Hrishikesh Ojah, P. Talukdar and Rumjhum Goswami

SUMMARY

Correlation and path analysis were carried out using fifty F_1 hybrids and their 15 parents for grain yield and its components in rice under aerobic condition to know the association among different traits and causes of association. Significant correlation with grain yield existed for 3 characters (number of productive tillers, spikelet fertility and chlorophyll content) apart from sufficient inter correlation among various adaptive characters. Path co-efficient analysis revealed the highest positive direct effect of root weight (1.65) on grain yield, followed by spikelet fertility (1.43) and plant height (0.92). Harvest index (1.25) through spikelet fertility exerted the highest indirect effect, followed by panicle harvest index (1.07) through spikelet fertility.

Key Words : Aerobic rice, Character association, Correlation, Path co-efficient

How to cite this article : Ojah, Hrishikesh, Talukdar, P. and Goswami, Rumjhum (2020). Correlation and path analysis for grain yield and adaptive characters in rice under aerobic condition. *Internat. J. Plant Sci.*, **15** (1): 24-28, DOI: 10.15740/HAS/IJPS/15.1/24-28, Copyright@ 2020: Hind Agri-Horticultural Society.

Article chronicle : Received : 09.11.2019; Revised : 04.12.2019; Accepted : 19.12.2019

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

Hrishikesh Ojah, Department of Plant Breeding and Genetics, S.C.S. College of Agriculture, Assam Agricultural University, **Jorhat (Assam) India**

Email : hrshikesh_ojah@rediffmail.com

Address of the Co-authors:

P. Talukdar and Rumjhum Goswami, Department of Plant Breeding and Genetics, Assam Agricultural University, **Jorhat (Assam) India**