PEROXIDASE ISOZYME IDENTIFICATION OF SOME RICE GENOTYPES IN M1 GENERATION UNDER DROUGHT STRESS LEVEL OF -0.03 MPa

Title	PEROXIDASE ISOZYME IDENTIFICATION OF SOME RICE GENOTYPES IN M1 GENERATION UNDER DROUGHT STRESS LEVEL OF -0.03 MPa
Author Order	of
Accreditation	
Abstract	The effort to fulfill the need of rice through the improvement of dryland productivity can be viewed as a more environmentally-friendly way. This research used 36 rice genotypes in M1 generation that were grown hydrophonically under drought stress level of -0.03 MPa. The identifications were conducted based on peroxidase isozyme marker. The isozyme patterns in zymogram were binary-coded by visual scores for each genotype, based on the thickness and the number in the appearance of bands on certain migration distance. The migration distances were measured based on values of Rf. The similarity coefficients were calculated using DiceÃƒÂ¢Ã‚Â€Ã‚Â™s coefficient that were used to construct dendrogram using the UPGMA employing the SAHN from the NTSYSpc 2.02. The results showed that the most resistant genotype under drought stress was R-4, and the genetic relationships among the genotypes were divided into two main groups, aromatic and non-aromatic group, in which some genotypes experienced the reduced levels of aromatic character (R-8 and R-9) and the drought resistance character (IU-2, IU-3, IU-4, IU-5, IU-6, IU-7, and IU-8), but there were some genotypes to able to improve the resistance under drought stress (R-2, R-3, R-5, R-6, R-7, IT-4, IT-5, and IT-7).ÃƒÂ‚Ã‚Â Keywords:ÃƒÂ‚Ã‚Â drought resistance, gamma irradiation, peroxidase isozyme, rice, sodium azide
Publisher Name	Faculty of Agriculture University of Brawijaya and Indonesian Agronomic Assossiation
Publish Date	2015-01-28
Publish Year	2014
Doi	
Citation	
Source	AGRIVITA, Journal of Agricultural Science
Source Issue	Vol 36, No 3 (2014)
Source Page	210-216
Url	http://agrivita.ub.ac.id/index.php/agrivita/article/view/436
Author	Dr Ir SAKHIDIN, M.P