TOLERANCE EVALUATION OF DROUGHT ON TEN LOCAL YOGYAKARTA RICE PLANT ACCESSIONS AT GERMINATION AND SEED GROWTH PHASE

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ABSTRACT

Research aims to know which Yogyakarta's local rice plant accessions tolerate towards drought on germination and seed growth phase. The research conducted in two phases, laboratory and field testing. Laboratory test used completely randomized design (CRD) with two factors and three replications, 10 local Yogyakarta's rice plant accessions, polyethylene-glicol (PEG) 6000 at level 0% or aquades and polyethylene-glicol (PEG) 6000 at level 20%. Field testing was based on 5 best accessions results in laboratory tested. The field testing used completely randomized (CRD) with two factors and three replications, local Yogyakarta's rice plant accessions and watering level 100% (550 ml) and 60% (330) field capacity. The data were analysed by diversity using variance (ANOVA) 5% and continued by Duncan Multiple Range Test (DMRT). The results shows experiment on germination phase namely A2 (Mandel), A3 (Menor), A4 (Sembada Merah), A5 (Sembada Hitam), and A6 (Menthik Grompol) have potention towards drought tolerance. Expemerint on seed growth shows namely A3 (Menor) and A4 (Sembada Merah) have potention towards drought tolerance.

Keywords : Rice Plant, Yogyakata Local Accessions, Drought Tolerance, PEG 6000 20%