

**Uji Potensi Hasil dan Daya Tahan 10 Galur Harapan Padi Sawah (*Oryza sativa* L.) Terhadap Serangan Cendawan (*Helminthosporium oryzae*) Di Kabupaten Jember.** Test of Yield Potential and Resistance Test Toward of 10 Lines of Paddy (*Oryza sativa* L.) to Brown Spot Disease (*Helminthosporium oryzae*) in Jember Regency. *Advisor : Dr.Ir. Suharjono, M.P.*

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### **ABSTRACT**

*Increasing population is equal with food needs. Constraints to fulfill food needs are climate anomalies and disease pests. Helminthosporium oryzae is one of the main disease of paddy. This research aimed to determine lines of paddy which have high yield potential and resistance of Helminthosporium oryzae. Research was carried out on July, 17<sup>th</sup> 2019 to Desember, 12<sup>th</sup> 2019. The research was conducted at Wirowongso Village, Ajung District, Jember Regency and in Jember Technology Laboratory, Jember State Polytech. Research using Non-factorial randomized block design (RAK) and further test Duncan Multiple Range Test (DMRT). There were 13 treatments and 3 replications. The treatments are UDS 001, UDS 002, UDS 003, UDS 004, UDS 005, UDS 006, UDS 007, UDS 008, UDS 009, UDS 010 and comparison of line of KI 237, varieties of Ciherang and Inpari-30. The yield potential of all treatments are classified as high yield potential. The resistance in the end of vegetative period was classified as resistant in all treatments except the comparison variety Inpari-30 which was classified as slightly resistant. The resistance at the end of flowering in all treatments was classified as slightly resistant, except for the UDS 001 line was classified resistant. The Resistance at the end of grain filling in all treatments was classified as slightly resistant.*

**Keywords :** *paddy, line, resistance*