

Rice variety IPB3S and IPB prima production technology to support food self-sufficiency in Indonesia

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Abstract

Dissemination of IPB3S rice variety combined with cultivation technology named IPB Prima was aimed to introduce IPB research product particularly for IPB rice variety with high-yield character that is IPB3S. The rice variety IPB3S and IPB Prima cultivation technology was expected to be one of solution to improve rice productivity and accelerate to food self-sufficiency in Indonesia. Research activity was consist of three main research unit i.e. (1) Dissemination of IPB3S rice variety and IPB Prima production technology; (2) The development of Information and management web-based system (IMS) for planning and monitoring IPB3S and IPB Prima application distribution; and (3) The development of High-capacity grain drying system in Fluidized-bed drying and in-store drying system. The objective of main research i.e. to introduce IPB high-yield rice variety, to accelerate rice productivity to support self-sufficiency, to develop integrated system model through fluidized and in-store drying, and to develop web-based management-information system in result analyzing IPB3S and IPB Prima distribution and technology application. The dissemination activities was arranged in two location. The first location was in Banyuwangi, East Java with total area 10.87 ha, consist of 8.91 ha planting area for IPB3S and 1.96 ha planting area for Ciherang. The second location is in Tegal, Middle Java with total planting area in 5 ha. The experiment was arranged in different treatment of varieties and cultivation method. The experiment consist of (1) rice variety Ciherang with conventional cultivation technology (P0); (2) rice variety Ciherang with IPB Prima cultivation technology (P1); (3) rice variety IPB3S with conventional cultivation technology (P2); (4) rice variety IPB3S with IPB Prima cultivation technology (P3). Planting distance for twin rows system is 50 cm x 25 cm x 12.5 cm. Planting distance for single row system is 25 cm x 25 x cm. The research result elucidated that productivity result in two location has different grades in similar trend. Experiment in Tegal resulted P0 result is 6.18 ton ha⁻¹, P1 result is 6.30 ton ha⁻¹, P2 result is 6.82 ton ha⁻¹, P3 result is 7.31 ton ha⁻¹. Experiment in Banyuwangi resulted optimum production of IPB3S variety productivity number are 7.29 ton ha⁻¹, while Ciherang are 6.73 ton ha⁻¹.

Keyword: Cultivation technology, IPB Prima, IPB3S, Production.

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