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PENGELOMPOKAN GALUR M_3 VARIETAS PADI LOKAL PASANG SURUT KALIMANTAN SELATAN BERDASARKAN KANDUNGAN AMILOSA DAN AMILOPEKTIN

GROUPING OF M_3 LINES OF LOCAL TIDAL SWAMP RICE VARIETIES OF SOUTH KALIMANTAN BASED ON AMYLOSE AND AMYLOPECTIN CONTENT

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ABSTRACT

The creation of new superior rice varieties with high productivity and short-lived is necessary to support food security. The rice varieties produced must also meet people's preferences, in this case have a rice taste that is preferred by the people of South Kalimantan. The purpose of study was to determine differences in content of amylose and amylopectin of rice grains between the genetic material, which consists of mutant lines of M_3 and five parents of local varieties of South Kalimantan. The experiment used a randomized block design with two replications, the genetic material as single faktor, used being five local varieties of South Kalimantan and 25 M_3 mutants derived from each parent's mutation. The data was analyzed of variants with the F test at the level of α=5%, then continued the Scott-Knott test at α=5%. The results showed that content of amylose and amylopectin of grain of M_3 lines significantly different with each parent. The results showed that the amylose and amylopectin content of rice grains from 30 genetic materials was significantly different. The results of the analysis of the grouping of 25 mutant lines and five parent varieties based on the content of amylose and amylopectin were obtained by nine groups. There are seven groups that belong to the rice type of rice textured pera consisting of 19 M_3 lines and five parents. There are two groups that belong to the pulen textured rice group consisting of six M_3 lines.

Keywords: Amylose; Amylopectin; Mutation; Plant breeding