

Amylose profile and rice grain morphology of selected F6 lines derived from a crossing of Black Rice and Mentik Wangi for the development of waxy pigmented rice

<b>Title</b>	Amylose profile and rice grain morphology of selected F6 lines derived from a crossing of Black Rice and Mentik Wangi for the development of waxy pigmented rice
<b>Author Order</b>	3 of 3
<b>Accreditation</b>	
<b>Abstract</b>	<p>Research on rice plant breeding to get superior black rice varieties with tender rice texture can be carried out by crossing Black Rice and Mentik Wangi variety. The rice lines derived from a crossing of these two varieties have recently reached the F6 line. The texture of rice is distinguished by the amylose content. The lower of the rice amylose, the more tender of the rice texture, and vice versa. This study aimed to find out the profile of amylose content and the grains morphology of the lines that will be developed as waxy pigmented rice. Analysis of amylose content was carried out using iodine-colorimetry methods. The quantification of amylose was measured based on the regression of the standard amylose curve. The results showed that all the F6 lines had the potential to be developed as waxy pigmented rice. Based on the Kruskal Wallis test, there was a variance in the amylose profile average of the eight genotypes. In terms of grains morphology, the line 482-17-7 and 482-17-18 had a combination colour between the two parents. In addition, there was a significant difference in grains size between the genotypes and the grain size of all lines were classified in the medium size. F6 lines resulted from the crossing between Black Rice and Mentik Wangi are recommended to be used as superior varieties of waxy pigmented rice.</p>
<b>Publisher Name</b>	Faculty of Agriculture, Universitas Gadjah Mada jointly with PISPI
<b>Publish Date</b>	2021-07-26
<b>Publish Year</b>	2021
<b>Doi</b>	DOI: 10.22146/ipas.61867
<b>Citation</b>	
<b>Source</b>	Jurnal Ilmu Pertanian
<b>Source Issue</b>	Vol 6, No 2 (2021): August
<b>Source Page</b>	117-123
<b>Url</b>	<a href="https://journal.ugm.ac.id/jip/article/downloadSuppFile/61867/14362">https://journal.ugm.ac.id/jip/article/downloadSuppFile/61867/14362</a>
<b>Author</b>	ZULFA ULINNUHA, S.P, M.Si