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Rice pasta containing cultivar 'Saemimyeon' with high amylose contents and methods thereof

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Abstract

Recently, strong interest in the well-being and healthy food trends lead a spreading of rice processing products such as rice noodles, rice breads, and rice cakes. However, most of rice varieties developed in Korea showed very limited processing properties in processing of noodles compare to that of wheat flour. Moreover, low competitiveness as a raw processing materials due to high price give poor evaluations for rice noodles processing. To cope those barriers, 'Saemimyeon' a Tongil type high yielding variety with a high amylose contents was developed in RDA. 'Saemimyeon' showed about 10 ~32 % of increase in yield as 7.08MT/ha and 26.7% of high amylose contents together with easy grinding property of 65.7% of high chalkiness ratio. The both of milled as well as brown rice of 'Saemimyeon' were well fit for processing properties in rice pasta where the contents of rice flour for rice pasta was 99% (1% of Tapioka starch was intermixed in to the rice flour). A spaghetti type for wet noodles and macaroni type for dry noodles were developed, respectively. Each of pasta were showed relatively more or less an equal quality and panel test compare to that of durum wheat pasta products. Finally, rice pasta products could suggest an alternative idea for a new rice processing items where rice noodles market was stagnant.

Keywords: rice, amylose, Saemimyeon, processing, rice pasta

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