

Development of Good Grain Quality Rice Taikeng No.5

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Abstract

Kaohsiung 142 one of parent of Taikeng 5, is an early mature variety but its grain is small and susceptible to *Nilaparvata lugens* stalk. However, Tainung 68 another parent of Taikeng 5 possesses brown plant hopper-resistance (resistant gene from ADS-7). Both were crossed with Tainung 68 and pedigree selection method was adopted for this breeding program. As segregation up to F₆, KS yu 1447 was selected and tested under practical field conditions. Because the grain quality and its disease and insect resistance was better than that of Tainung 67, it was agreed to be registered as Taikeng No.5.

Average Yield at first and second crops of Taikeng 5 from seven sites in regional trials was 6,161 kg/ha and 4,480 kg/ha, respectively. Yield increased at first crop by 4.8%, at second crop by 4.4% as compared to Tainung 67.

There is significant difference in yield potential between Taikeng 5 and Tainung 67 regardless of crop difference.

The stability test through first and second crops yield indicated that *b_i* value was 1.0451 and standard error was 0.0608 which expressed the yield was considerable steady. This variety has been recommended to the farmers of whole island.

Keywords : Good quality rice, New-bred variety Taikeng 5.

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