Development of a New Japonica Type Waxy Rice Variety- Tainung Waxy No.73

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Abstract


A new japonica type waxy rice variety was developed after more than 12 years of breeding by crossing the female Taikeng Waxy No.1, a Japonica glutinous rice variety, with the male Taikeng No.16 in 1992, and was named and registered as Tainung Waxy No.73 in 2004. During the regional yield trails, it was planted in 6 cultivated areas for 4 crop seasons using Taikeng Waxy No.1 variety as a control. The results showed that the average growth period of Tainung Waxy No.73 was 120 days in the first crop season and 108 days in the second crop season, which were 3 days longer than control at both seasons. The new waxy rice was a heavy-ear variety with grain weight of 2 g per panicle and the average weight of 28 g per 1000 grains. The average grain yields of Tainung Waxy No. 73 were up to 6,876 kg and 4,627 kg per hectare for the first and the second crop season, respectively, about 10% higher than control. This new variety has better characteristics of lodging, shattering and stem stalk vigor than the control. The chewing of sticky rice cake and mochi making by Tainung Waxy No.73 were also better than the check variety according to the artificial and personal pasting tests. The Tainung Waxy No. 73 displays medium resistance to leaf and panicle blast diseases, but showed susceptibility or moderate susceptibility to sheath blight, bacterial leaf blight, brown planthopper, smaller brown planthopper, white backed planthopper, and strip stem borer. Attention should be paid to prevent the pest damage during cultivation.

Key words: rice, waxy, Tainung Waxy No.73, breeding.

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