PC-17

Comparison on Physicochemical and Yield of Milled Kernel in Waxy Corn Hybrids

<u>Jong Hyeong Lee</u>^{1*}, Byoung Rourl Choi¹, Jung Hee Jang¹, Tea Jin Won¹, Hyeun Yong Do¹, Jeong Hyeon Ji¹, Young Rok Kim¹

The waxy corn is a crop that is highly favored by consumers for it's summer snack in Korea. However, availability of waxy corn is limited because most of them are used for steamed waxy corn. In order to increase the consumption of waxy corn, we carried out a selection test of waxy corn varieties suitable for cooking-with-rice. The kernel yields of the waxy corn varieties were investigated by dividing the kernel yield and total kernel yield after harvest fresh waxy corn.

After the harvest of fresh waxy corn, kernel yield and total kernel yield of waxy corn was 246kg/10a, 615kg/10a, the highest in quantity and the weight of 100 grains was 27.5g in Ilmichal. The protein content of waxy corn variety was highest in Ilmichal at 13.9% however lowest GMB0026 at 5.3%. There was no significant difference in milling ratio relative to other hybrids in order to select a type of milled kernel suitable for cooking-with-rice-waxy corn. However, the longer the time of steeping in water and the degree milling, the better the taste. Among the waxy corn variety, GMB0026 showed the best taste quality for 15 minutes milling and 2 hours steeping in water. These results will provide fundamental information to extend milled waxy corn usage.

¹Gyeonggi Do Agricultural Research & Extension Services, Republic of Korea

^{*}Corresponding author: Tel. 031-229-5774, E-mail. ljh1328@gg.go.kr