

Breeding of a New Soft Wheat Cultivar “Fukuakari” with Pre-harvest Sprouting Resistance

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Abstract

“Fukuakari” was registered as a new wheat cultivar in 2010. It was bred by the bulk method at the NARO Institute of Crop Science, Tsukuba, Ibaraki, Japan, from a cross made in 1998 between “Tanikei RA4215” and “Kanto 119”.

“Fukuakari” is an awned, brown-glumed, soft wheat cultivar with red seeds. The degree of its winter habit is I–II (spring type). Compared with “Norin 61”, the leading cultivar in central and southwestern Japan, “Fukuakari” has shorter culm length and superior lodging resistance. “Fukuakari” matures 4 days earlier and its yield is higher than that of “Norin 61”. “Fukuakari” is resistant to wheat yellow mosaic virus and powdery mildew but susceptible to scab. “Fukuakari” shows good noodle texture because its amylose content is lower than that of “Norin 61”.

Fukushima prefecture designated “Fukuakari” as a recommended cultivar in 2011, because its pre-harvest sprouting resistance is good with “difficulty” and it has early maturity.

Key Words : soft wheat, noodle, pre-harvest sprouting, amylose, new cultivar

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