“Rakufuumai”, A Rice Cultivar for Sake and Awamori Brewing


Summary

A rice cultivar, ‘Rakufuumai’, has been developed at the Central Region Agricultural Research Center, NARO. The cultivar was bred by crossing ‘Dontokoi’, which has strong resistance for lodging, and ‘Gohyakumangoku’, with a high aptitude for sake brewing. The application to the Ministry of Agriculture, Forestry and Fishery for official registration was made in 2011, and the registration was granted in 2014.

The heading date and maturing date of ‘Rakufuumai’ are 2–3 days later than those of ‘Gohyakumangoku’. The culm length of ‘Rakufuumai’ is shorter by more than 12 cm than that of ‘Gohyakumangoku’. The panicle length of ‘Rakufuumai’ is slightly shorter than that of ‘Gohyakumangoku’, while the panicle numbers of the two cultivars are similar. ‘Rakufuumai’ has strong lodging resistance and yield similar to, or slightly higher than, that of ‘Gohyakumangoku’. The 1000-grain weight is almost 26 g, which is larger than that of ‘Gohyakumangoku’ by 1 g. The percentage of the occurrence of white core in grain is approximately 20%.

The aptitude for high-milling of ‘Rakufuumai’ is superior than that of ‘Gohyakumangoku’ and that for sake brewing is similar to that of ‘Gohyakumangoku’ or ‘Takanenishiki’. The taste of awamori brewed from ‘Rakufuumai’ is light and aromatic.

‘Rakufuumai’ is predicted to possess the blast resistance gene $Pii$. The field resistance for rice leaf blast is moderately weak, and the resistance for panicle blast is moderate. Cold tolerance at the booting stage is moderately weak. Sprouting resistance is moderately strong. Resistance to bacterial leaf blight is weak. ‘Rakufuumai’ is susceptible to rice stripe virus disease.

Received 19 July 2017, Accepted 29 May 2018

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