

Breeding of the High-lignan Sesame Variety “Nishikimaru”

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Abstract

A new high-lignan sesame variety “Nishikimaru” was developed at the NARO Institute of Crop Science in 2015. “Nishikimaru” was selected from the progeny of a cross between “Masekin” and “Kanto12 (Gomazou)” to improve high-lignan sesame. “Nishikimaru” has an earlier harvesting date than “Gomazou”. The plant height of “Nishikimaru” is shorter than that of “Masekin” and “Gomazou”, and it has more branches than “Masekin”. The yield ability of “Nishikimaru” is similar to or higher than that of “Masekin” and lower than that of “Gomazou”. “Nishikimaru” has a gold seed coat color, and contains higher levels of sesamin and sesamolin than “Masekin”. “Nishikimaru” is adapted to the flatland from the Kanto region to the west of Japan.

Key Words : gold sesame, variety, lignan, sesamin, sesamolin

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