

The Breeding and Characteristics of a Sunflower Cultivar, “North Queen”

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Summary

A new Sunflower cultivar, “North Queen”, was developed at the Hokkaido Nat. Agr. Exp. Stn., Sapporo, Japan. This cultivar was registered as “Sunflower Norin No.1”, bred by the Ministry of Agriculture, Forestry and Fisheries and recommended by the Hokkaido prefectural government.

“North Queen” is an F1 hybrid variety between a cytoplasmic male sterility line “cmsHA234” and a fertility restoring line “RHA297”, which were introduced from North Dakota States Univ., US. by National Agriculture Research Center, Tsukuba, Japan.

The characteristics of “North Queen”, compared with those of “DO707”, are as follows.

1) The flowering and maturing times of “North

Queen” are about the same those of “DO707”.

2) “North Queen” is taller than “DO707”, but its lodging resistance is similar to that of “DO707”.

3) “North Queen” and “DO707” have similar degree of susceptibility to Sclerotinia rot caused by *Sclerotinia sclerotiorum* (Lib.) de Bary as “DO707”.

4) Seed oil content of “North Queen” is a little lower and seed yield is higher than those of “DO707” and crude oil yield of “North Queen” is the same as “DO707”.

5) “North Queen” has the same fatty acid composition as that of “DO707”, and its α -tocopherol content is a little lower than that of “DO707”.

“North Queen” is a superior cultivar that is suitable for Hokkaido.

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