

Registration of “Karaman 2016” Dry Bean (*Phaseolus vulgaris* L.) Variety

“Karaman 2016” dry bean variety was developed by Transitional Zone Agricultural Research Institute and registered in 2016. One of the parents of Karaman 2016, 4F-675-1 coded line has a coarse-grained, climbing plant habits, but its tolerance to viral diseases is not good. In order to increase the line’s tolerance to viral diseases and at the same time maintain the current grain size, hybridization was performed with the resistance source 4F-2833. From the obtained 4F-675-1 / 4F-2833 pedigree population single plants were selected using single plant selection method. In order to transfer the bacterial halo blight (*Pseudomonas syringae* pv. *phaseolicola*) disease resistance gene and earliness character to the 5th selected plant (4F-675-1/4F2833-5), it was hybridized with the foreign disease-tolerant Weihing variety in 2004. In 2009, single plant selection was made in the F₅ generation and in 2011 this material was taken for yield trials.

Karaman 2016 variety is semi-climbing (65-81 cm) and coarse grain type. Karaman 2016’ grain is larger

than the other climbing type varieties’ grain. The number of days of flowering varies between 38-69 days and the number of physiological ripening days between 106-114 days.

Average yield in the registration trials was recorded 180.6 kg / da. In breeding trials, the highest yield obtained from Karaman 2016 is 350 kg da⁻¹. It is recommended for dry bean cultivating areas.

The variety, Karaman 2016 has a medium tolerance to bacterial diseases, and it attracted attention with its tolerance to root rot disease in the registration trials.

100 seed number, hydration capacity, swelling index, cooking time and protein rate of Karaman 2016 are between 35.2-42.0 g, 0.42-0.47 g/grain, 2.06-2.41%, 35-41 min. and 21.3-23.5%, respectively, and its cooking flavor is quite good. Breeder material and gradual seed production are conducted by TZARI.

Figure 1. Pod, plant and grain of the Karaman 2016 variety (Original).



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References and Notes

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