



Registration of “Sinanbey” Winter Feed Barley (*Hordeum vulgare* L.) Variety

Sinan AYDOĞAN Namuk ERGÜN* İsmail SAYİM Melih BİLİR Emre KARAHAN Gülden ÇETİN ÖZKAN

Central Research Institute for Field Crops, Ankara, Turkey

* Corresponding author e-mail: namuk.ergun@tarimorman.gov.tr

Citation:

Aydoğan S., Ergün N., Sayim İ., Bilir M., Karahan E., Çetin Özkan G., 2023. Registration of “Sinanbey” Winter Feed Barley (*Hordeum vulgare* L.) Variety. Ekin J. 9(2):174.

Received: 22.03.2023

Accepted: 10.04.2023

Published Online: 31.07.2023

Printed: 31.07.2023

Sinanbey is a winter feed barley (*Hordeum vulgare* L.) variety developed by the Central Research Institute for Field Crops (CRIFC). In 2021, the variety was released primarily for its high yield and wide adaptation to rainfed and semi-arid barley production areas. The pedigree was derived from the multi-cross of ADAY-2/4/ROHO//ALGER/CERES/3/ALPHA/DURRA/5/ANADOLU-98, made in 2002.

The bulk breeding method was used after crossing and segregating material was subjected to natural selection between F₂-F₅ progenies. The single-head selection was made in F₅ progeny based on breeder's aims. Sinanbey was assigned the line number ANKA 08 in yield trials conducted in randomized complete block design. In regional yield trials, observations were made in multiple environments over Central Anatolia for two growing seasons. In 2019, ANKA 08 was submitted to the Variety Registration and Seed Certification Centre to be tested in the Central Anatolia Barley Registration Trials. As the candidate variety performed above the check varieties (4.64 t ha⁻¹) yielding competitively better about 5.08 t ha⁻¹, ANKA

08 was registered as Sinanbey in 2021 (Anonymous 2021).

Sinanbey is a two-rowed, white-kernelled, and uniformly tillered with a moderately early heading date (Figure 1). No significant susceptibility is detected to economically important barley diseases. Based on the registration trials, grain yield varies between 3.77 and 6.80 t ha⁻¹. Additionally, Sinanbey has a hectoliter weight ranging from 62.4 to 70.8 kg while 1000-kernel weight varies between 40.7 and 47.9 g with a protein content ranging from 13.0 to 14.6 %. The ratio of plump kernels is between 37.4 and 77.6% for a 2.5 mm sieve. Sinanbey is recommended for winter sowing in dry and semi-arid areas of Central Anatolia and Transitional regions.

Acknowledgments

Sinanbey variety was released via the Central Anatolia Region Barley Breeding Research Project numbered TAGEM/TBAD/B/18/A7/P40/172 and funded by the General Directorate of Agricultural Research and Policies (TAGEM).



Figure 1. General view of field, spike, and kernels of Sinanbey variety. (Original)

References and Notes

Anonymous (2021). Report of Central Anatolian Dry Barley Registration Trials, Ankara, Türkiye (in Turkish).