



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

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Ekin is two rowed barley (*Hordeum vulgare* L.) variety developed by Trakya Agricultural Research Institute (TARI) and registered in 2023. Ekin is developed by crossing Coss/OWB71080-44-1H/3/Obz/Vic//Unk(1989-90AGBOreg.2-13)/Unk(1989-90AGB Oreg.2-14) with TEA2507-0T-0T-10T-2T-8T-0T and segregating generations examined in pedigree method. Crossing was made in 2009 and yield test began in 2017-2018 growing year.

Ekin is a two-rowed variety (Figure 1) and its spike is long and compact. It resembles with the cultivar Hasat. Ekin is a tall cultivar, similar to Harman. Plant height is between 80 and 125 cm depending on the growing conditions. It is medium early and as it has good adaptation ability, it has been grown throughout Trakya-Marmara and the transitional zone region of Türkiye. It gives a high yield both on fertile and less fertile soils. It has resistance to winterkilling and is tolerant to medium drought conditions. Ekin is highly tolerant to net blotch (*Pyrenophora teres*), scald (*Rhynchosporium graminicola*), and powdery mildew (*Blumeria graminis* f. sp. *hordei*).

Its yield potential is high however, a high yield can be obtained if environmental conditions are favourable and good agronomic practices followed. The highest grain yield obtained was 10,031 kg ha⁻¹ in the Edirne location in the 2020-2021 growing years. The mean yield of the variety testing experiment was 8041 kg ha⁻¹ in Trakya growing conditions. The suggested planting rate is between 450-500 seeds/m².

Its grain-feeding quality is good. The mean values of some qualities of the variety testing experiment (2021 and 2022) are; test weight 73.0-74.9 kg/hl, thousand kernel weight 42.4-48.0 g, protein content 9.2-11.8%, and sieve value 87.3-94.5%. The highest quality values during the 2018-2019 growing seasons before the variety testing experiment were; 1000-kernel weight 49.2 g, test weight 75.0 kg, protein content 12.5%, and sieve value 94.2%.

Pre-basic and Basic seeds of the Ekin cultivar have been produced by Trakya Agricultural Research Institute (TARI) and UTEK Seed Company. Certified seeds of the Ekin cultivar are produced by both private companies and state farms.



Figure 1. Spike and grain of the Ekin variety (Original)

References and Notes

Anonymous, (2023). Trakya Bölgesi iki sıralı arpa tescil raporu, Ankara, 2023 (in Turkish).