



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

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Poyraz is a six-rowed barley (*Hordeum vulgare* L.) variety developed by Trakya Agricultural Research Institute (TARI) and registered in 2023. Poyraz is developed by crossing Aleli/Gob//E.Quebracho/3/Msel/5/Ataco/Alaloe//Lino/3/Mja/Brb2//Quina/4/Ciru with TEA2666-0T-0T-0T-14T-5T-0T and segregating generations examined in pedigree method. The crossing was made in 2010 and the yield test began in the 2018-2019 growing year.

Poyraz is a six-rowed variety (Figure 1) and its spike is long, and medium-compact. It resembles the cultivar Martı. Poyraz is a tall cultivar, similar to Martı. Plant height is between 88 and 126 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 high yield both on fertile and less fertile soils. It has resistance to winterkilling and is tolerant to drought conditions. Poyraz is highly tolerant to net blotch (*Pyrenophora teres*) and powdery mildew (*Blumeria graminis* f. sp. *hordei*), susceptible to scald (*Rhynchosporium graminicola*).

Its yield potential is high however, a high yield can be obtained if environmental conditions are favorable and good agronomic practices followed. The highest grain yield obtained was 12,122 kg ha⁻¹ in the Tekirdağ location in the 2021-2022 growing years. The mean yield of the variety testing experiment was 8648 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 (2020 and 2021) are; test weight 70.9-74.8 kg/hl, thousand kernel weight 41.0-46.4 g, protein content 9.9-12.1%, and sieve value 83.0-95.4%. The highest quality values during the 2018-2019 growing seasons before the variety testing experiment were; 1000-kernel weight 46.0 g, test weight 72.6 kg, protein content 10.5%, and sieve value 93.9%.

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



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

References and Notes

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