

10(2):136, 2024



www.ekinjournal.com

Ekin International biannual peer-reviewed journal

Registration of "TB Yaman" Bread Wheat (Triticum aestivum L.) Variety

İrfan ÖZTÜRK

Trakia Agricultural Research Institute, Edirne, Türkiye

* Corresponding author e-mail: irfan.ozturk@tarimorman.gov.tr

Citation:

Öztürk İ., 2024. Registration of "TB Yaman" Bread Wheat (Triticum aestivum L.) Variety. Ekin J. 10(2):136.

TB Yaman is a winter bread wheat (*Triticum aestivum* L.) variety developed by Trakya Agricultural Research Institute (TARI) and registered in 2023. TB Yaman is developed through pedigree method by crossing Albana/7/Sau41/Sad1/5/Agri"S"/093-44/3/Kkk/ltd/Lov29/4/FKong15//Bow/Pwn/6/1518-4-38K with TE7223-0T-0T-0T-5T-0T. The crossing was made in 2010 and the yield test began in the 2018-2019 growing year.

The spike of the TB Yaman cultivar is mediumlong, white, smooth, with awn and medium compact (Figure 1). The flag leaf is medium dark-green and with medium glaucousity. Grain is oval, hard and red colour. Yaman is a tall cultivar, similar to Değirmen. Plant height is between 90 and 105 cm depending on the growing conditions. It is medium-early and as it has good adaptation ability, it has been grown throughout the Trakya-Marmara region and some other transitionalzone parts of Türkiye. It gives high yield both on fertile and less fertile soils. It has resistance to winterkilling and is tolerant to drought conditions. TB Yaman is highly tolerant to stripe rust (Puccinia striiformis f. sp. tritici) and leaf rust (Puccinia triticina). It has tolerant to septoria leaf disease and powdery mildew Blumeria graminis f. sp. tritici (syn. Erysiphe graminis).

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 10851 kg ha⁻¹ in a variety testing experiment (Edirne location in the 2020-2021 cycle). The mean yield of the variety testing experiment was 7138 kg ha⁻¹ in Trakya growing conditions. The suggested planting rate is between 500-550 seeds/m².

Its grain quality is good. The mean values of some bread-making qualities of the variety tested during 2022 and 2023 are; test weight 78.3 kg hl, thousand kernel weight 31.3 g, protein content 13.5-16.1%, sedimentation (Zel) 69 ml, gluten index 99.4%, gluten value 32.7%, alveograph energy value (W) 309 and flour yield 70.9%. The highest quality values in the 2020-2021 growing seasons application of the variety were; thousand kernel weight 45.0 g, test weight 83.0 kg, protein content 12.7%, gluten value 36.7%, gluten index 93.0% and sedimentation (Zel) 68 ml.

Pre-basic and basic seeds of the TB Yaman cultivar have been produced by Trakya Agricultural Research Institute (TARI) and Trakya Birlik Seeds Company. Certified seed of the TB Yaman are produced by both private companies and state farms.





Figure 1. Spike and grain of the TB Yaman cultivar. (Original)

References and Notes

Anonymous (2024). Trakya Bölgesi Ekmeklik Buğday Tescil Raporu 1, Ankara 2024, (in Turkish).