

## Registration of “NKU Asiya” Bread Wheat (*Triticum aestivum* L.) Variety

NKU Asiya is a winter bread wheat (*Triticum aestivum* L.) variety developed using combination breeding by Tekirdağ Namık Kemal University, Agricultural Faculty and registered in 2018. The pedigree of NKU Asiya is Selianka/Krasunia and its history TURCBWW05TD0065-099TD-099TD-099TD-015TD-0TD. Crossing was made in 2005 and grain yield test began in 2011-2012 growing year. The spike of the NKU Asiya variety is moderately long and density, white, awned. The flag leaf is twisted, dark-green, and with medium glaucosity. Grain is oval, semi hard and red color. NKU Asiya is a mid-tall variety, similar to Flamura 85 and Esperia varieties. Plant height is between 85 and 95 cm depending on the growing conditions. NKU Asiya variety is a winter type, mid-early, resistant to winter hardiness, good tolerant to drought, high ability of tillering and trashing, and since its wide adaptability, it can be grown safely not only in the Thrace-Marmara Region, but also in other wheat production areas of our country.

NKU Asiya variety is tolerant to powdery mildew *Blumeria graminis* f. sp. *tritici* (Syn. *Erysiphe graminis*) and to stripe rust (*Puccinia striiformis* f. sp. *tritici*) and moderate susceptible to leaf rust (*Puccinia triticina*). It shows high yield stability ranging from 6.3-8.4 t ha<sup>-1</sup> in Thrace Region, however If environmental conditions are appropriate and agronomic applications

are apply well, it has the ability to increase grain yield even more. The highest grain yield was determined in Tekirdağ location with mean value of 9.645 t ha<sup>-1</sup> in 2012-2013 growing season. Suggested sowing rate is 500 seeds m<sup>2</sup>. Depending on the soil type and structure and soil analysis results, it is recommended to apply 70 kg ha<sup>-1</sup> pure phosphorus and 170-180 kg ha<sup>-1</sup> pure nitrogen.

Bread-making quality is good. The mean values of some grain qualities of the official variety testing experiment (2016 and 2017) are; test weight 76.7 ±2.1 kg hl<sup>-1</sup>, thousand kernel weight 35.4±3.0 g, protein content 13.3±1.3%, water absorption 56.1±1.7% and Zeleny sedimentation 50.1±11.1 ml, alveograph energy value (W) 202.4±16.5 10<sup>-4</sup> joule. The highest quality values such as thousand grain weight, test weight, protein content, gluten ratio, gluten index, Zeleny sedimentation value, alveograph energy (W) and flour yield for the variety were analyzed with averages of 44 g, 79.1 kg/hl, 15.7%, 44.0%, 87.5, 68 ml, 230 joule and 71% respectively, in 2012-2013 growing season.

Pre-Basic and Basic seeds of the NKU Asiya variety have been produced by Tekirdağ Namık Kemal University, Agricultural Faculty. Certified seed of the NKU Asiya variety are produced by a private seed company.

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



Kayıhan Z. KORKUT, İsmet BAŞER\*, Oğuz BİLGİN,  
Alpay BALKAN

Department of Field Crops, Faculty of Agriculture,  
Tekirdağ Namık Kemal University, Turkey

\* Corresponding author e-mail:  
ibaser@nku.edu.tr

### References and Notes

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