Released Varieties

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Registration of "Saban" Bread Wheat variety

Saban is winter bread wheat (*Triticum aestivum* L.) variety developed by Trakya Agricultural Research Institute (TARI) and registered in 2014.The pedigree of Saban involved cross Trakia/3/MvC410-90/GK Kalaka//MvC410-90/Ftm-II with TE6060-1T-1T-1T-0T. Crossing was made in 2004 and yield test began in 2009-2010 growing year.

The spike of the Saban cultivar is moderately long, white, smooth, with awn and compact. It resembles cultivar Gelibolu. The flag leaf is twisted, dark-green, and with medium glaucousity. Grain is oval, hard and red colour. Saban is a medium-tall cultivar, similar to Flamura 85, Gelibolu and Tekirdağ. Plant height is between 70 and 95 cm depending on the growing conditions. It is medium early and as it has good adaptation ability, it has been grown throughout Trakya-Marmara region and some other parts of Turkey. It gives high yield both on fertile and less fertile soils. It has resistance to winterkilling and is tolerant to medium drought conditions. Saban is tolerant to powdery mildew (*Erysiphe graminis* f. sp. *tritici*) and susceptible to stripe rust (*Puccinia striiformis* f. sp. *tritici*) and leaf rust (*Puccinia recondita*).

Yield potential is high however; high yield can be obtained if environmental conditions are favorable and good agronomic practices are applied. The highest grain yield obtained was 10561 kg ha^{-1} in Tekirdağ location in 2003-2014 growing years. Mean yield of the variety testing experiment was 8318 kg ha^{-1} in Trakya growing conditions. Suggested planting rate is between 450-500 seeds/m^2.

Grain quality is good. The mean values of some bread making qualities of the variety testing experiment (2001 and 2013) are; test weight 77.8 kg, thousand kernel weight 40.1 g, protein content 13.8%, absorpsion 38.9% and sedimentation (Zel) 38.1 ml, alveograph energy value (W) 140.5. The highest quality values in 2010-2011 growing seasons were; test weight 79.1 kg, protein content 16.7%, gluten value 46.0%, gluten index 91.5% and sedimentation (Zel) 65 ml.

Pre-Basic and Basic seeds of the Saban cultivar have been produced by Trakya Agricultural Research Institute (TARI). Certified seed of the Saban are produced by both private companies and state farms.

Figure 1. Spike and grain of the Saban cultivar

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Suggested Readings

Anonymous (2014). Tescil Denemeleri Raporu, Ankara

Öztürk İ and Korkut KZ (2011). Characterization of Drought Resistance and Its Relations with Quality in Bread Wheat (*Triticum aestivum* L.) Genotypes. Namık Kemal Uni. 2011. (Ph. D. Thesis)

Öztürk İ, Avcı R, Kahraman T, Girgin CV and Tuna B (2013). Trakya Agricultural Research Institute Annually Reports, Edirne, 2014. Trakya Agr. Res. Inst., Edirne, Turkey

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Öztürk İ (2015). Trakya Bölgesi İçin Geliştirilen Yeni Çeşitler. Harman Time Dergi. Agustos 2015, Yıl: 3, Sayı: :30 Sayfa:52-54. ISSN:2147-6004

Registration of "Kopru" Bread Wheat variety

Köprü is winter bread wheat (*Triticum aestivum* L.) variety developed by Trakya Agricultural Research Institute (TARI) and registered in 2015. Köprü emanated from cross Pehl//Rpb8-68/Chrc/3/506/88-113 and selection history is TE 5793-1T-1T-1T-1T-4T-0T. Cross was made in 2001-2002 and yield testing began in 2010-2011 growing year.

The spike of the Köprü cultivar is moderately long, white colour, smooth, with awn and compact. The tip of the spike is so compact. Appearance of the spike looks like Tekirdağ but tip of the spike is different. The flag leaf is twisted, dark-green, and with gloucoisity. The grain is oval, hard, red colour and very large. Köprü is medium-tall cultivar with 95 cm plant height. It has resistance to winterkilling, tolerant to medium drought condition and is medium early.It has high productive tillering capacity. It is suitable for growing on fertile and less fertile soils. Köprü is susceptible to powdery mildew (*Erysiphe graminis* f. sp. *tritici*). It has tolerance to yellow rust (*Puccinia striiformis* f. sp. *tritici*) and leaf rust (*Puccinia recondita*) and it carries Lr9 gene.

Köprü has high yield potential. Average yield of the 2011 and 2012 growing year in Trakya region was 7153 kg ha^{-1}. The highest yield with 8984 kg ha^{-1} was obtained in 2011-2012 growing season in Tekirdağ location. Suggested planting rate is 450-500 seeds/m^2.

Köprü has good bread making quality characteristics. Some of the quality mean valueof the testing experiment years (2012 and 2014) are; thousand kernel weight 36.2 g, test weight 74.7 kg, grain protein content 12.7%, absorpsion55.7% and sedimentation 38.1 ml, alveograph energy value (W) 134.7 and flour yield 60.8%. Before releasing testing experiment thousand kernel weight 46.3 g, test weight 80.7 kg, grain protein content 12.7%, gluten value 40.2 %, gluten index 66.1% and sedimentation 39.5ml. In the same period (2010-2011) the highest values were; grain protein content 15.1%, gluten value 41.7%, gluten index 81.6%, sedimentation (Zel) 52 ml, absorpsion 66.5%, alveograph energy value (W) 164.

Pre-Basic, Basic seeds and Certified seeds of the Köprü cultivar have been produced by Trakya Agricultural Research Institute (TARI).

Figure 1. Spike, grain and in the field of the Köprü cultiva

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Suggested Readings

Anonymous (2015). Tescil Denemeleri Raporu, Ankara

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Registration of "Yuksel" Bread Wheat

Yüksel is winter bread wheat (*Triticum aestivum* L.) variety selected from IWWIP program and selection was made by Trakya Agricultural Research Institute (TARI) and registered in 2016. Yüksel resulted from cross OK81306/STAR'S' and selection history is CMSW92WM00167S-17WM-05WM-015WM-010WM-3WM-0WM-5T-0T. Selection was made in 2009-2010 and yield testing began in 2013-2014 growing year.

The spike of the Yüksel cultivar is moderately long, white colour, smooth, with awn and compact. Appearance of the spike looks like Flamur 85 but tip of the spike is different. The flag leaf is twisted, dark-green, and with slightly gloucoisity. The grain is oval, hard, red colour and large. Yüksel is medium-tall cultivar with plant height variying from 78 cm to 100 cm. It has resistance to winter killing, tolerant to medium drought condition and is medium early. It has high productive tillering capacity. It is suitable for growing on fertile and less fertile soils. Yüksel is resistance to leaf rust (*Puccinia recondita*) and it carries Lr9 gene, yellow rust (*Puccinia striiformis* f. sp. *tritici*) and powdery mildew (*Erysiphe graminis* f. sp. *tritici*) resistance. It has tolerance to *Septoria tritici* leaf disease.

Yüksel has high yield potential. Average yield of the 2013 and 2015 growing year in Trakya region was 8077 kg ha^{-1}. The highest yield with 9310 kg ha^{-1} was obtained in 2013-2014 growing season in Edirne location. Suggested planting rate is 500-550 seeds/m^2.

Yüksel has good bread making quality characteristics. Some of the quality value of the testing experiment years (2013 and 2015) are; thousand kernel weight 35.2-42.8 g, test weight 73.1-78.8 kg, grain protein content 12.3-14.3%, absorpsion 56.5-60.9% and sedimentation 41-51 ml, alveograph energy value (W) 111-199, flour yield 67.1-72.5%. Before releasing testing experiment thousand kernel weight 40.6 g, test weight 80.8 kg, grain protein content 13.8%, gluten value 36.6%, gluten index 96.7% and sedimentation 56 ml.

Pre-Basic, Basic seeds and Certified seeds of the Yüksel cultivar have been produced by Trakya Agricultural Research Institute (TARI).

Figure 1.Spike and grain of the Yüksel cultivar

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Anonymous (2016). Tohumluk Tescil ve Sertifikasyon Merkezi Müdürlüğü Raporu, Ankara

Öztürk İ, Korkut KZ (2016). Stability Parameters and Effect of the Drought Application on Different Growth Stage in Some Quality Characters of Bread Wheat (*Triticum aestivum* L.) Genotypes. ICBC 2016. 15. International Cereal and Bread Congress İstanbul.

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