

Registration of "Bossa 159" Cotton (Gossypium hirsutum L.) Variety

Zeki NASIRCI* Ayten DOLANÇAY

Eastern Mediterranean Agricultural Research Institute, Adana, Türkiye

* Corresponding author e-mail: znasirci@gmail.com

Citation:

Nasırcı Z., Dolançay A., 2023. Registration of "Bossa 159" Cotton (Gossypium hirsutum L.) Variety. Ekin J. 9(2):176.

Received: 13.10.2022 Accepted: 09.02.2023 Published Online: 31.07.2023 Printed: 31.07.202	Received: 13.10.2022	Accepted: 09.02.2023	Published Online: 31.07.2023	Printed: 31.07.20223
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Bossa 159 is upland cotton (*Gossypium hirsutum* L.) variety developed by Eastern Mediterranean Agricultural Research Institute (EMARI) registered in 2021. Bossa 159 is developed by single crossing as Cerdo 45/GS 93 in pedigree method. Crossing was made in 2010 in Adana. F_1 generation was grown in Adana and all individual plant selections, progeny rows and line selections were made in Adana. Elite line performance tests were carried out in Adana, Hatay and Şanlıurfa in 2017-2018.

Bossa 159 is in the medium-early maturity group, besides having a semi-pyramidal plant form and upper medium tall cultivar. Petal colour is cream and pollen colour yellow. Leaf and stem pubescence is moderate.

Bossa 159 variety has high seedcotton yield, lint yield and adaptability as well as superior fiber quality properties according to upland cotton. Average of % Lint is 42-43. Some of important fiber quality values are micronaire 4.8, length 32-33 mm, strength 33 g/ tex, Rd 78 and Trash ID 4.

Plant height is between 130 and 160 cm depending on the growing conditions and cotton regions. It is medium early and as it has very good adaptation ability, it has been grown throughout Çukurova, Aegean and South Eastern Anatolia regions of Turkey. It gives high seedcotton yield both on different soil and under high temperature conditions. It is tolerant to verticillium wilt. Its yield potential is high however, high yield can be obtained if environmental conditions are applied with good agronomic practices by farmers. In the trials conducted by Variety Registration and Seed Certification Center (TTSM) in the Aegean-Mediterranean regions in 2019 and 2020, Bossa 159 variety ranked third in terms of seedcotton yield and fourth terms of lint yield.

The highest seedcotton yield obtained was 6450 kg/ha⁻¹ in Adana and Şanlıurfa in 2017-2018 growing years. Average of mean yield of the variety testing experiment was 6150 kg/ha⁻¹ in all cotton regions and growing conditions.

Pre-basic seeds of the Bossa 159 cultivar have been produced by Eastern Mediterranean Agricultural Research Institute. Seed sales and marketing rights of Bossa 159 variety were transferred to Caso Seed Industry company from Diyarbakır for 10 year period in March 2020. Seed lots are currently produced and marketed by the Caso Seed Company.



Figure 1. Before blooming, blooming and harvesting stage of the Bossa 159 cultivar. (Original) **References and Notes**

Anonymous (2020). Ege-Akdeniz Pamuk Tescil Raporu, Ankara, Türkiye (in Turkish).