



Registration of "Yörem 55" Forage Legume (*Trifolium meneghinianum* Clementi) Variety

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Yörem 55 (*Trifolium meneghinianum* Clementi) is an annual (aerial-seeding) temperate legume developed and registered by the Black Sea Agricultural Research Institute in 2020. It can be grown in the Black Sea region, coastal areas and some other transitional regions of Turkey. It can be made use for hay, silage, grazing, and as a cover or green manure crop (for soil improvement), and pollinators.

Gelemen clover (Yörem 55) is developed through within-half sibling family selection as an early flowering and diploid variety. It was tested between 2016-2019 at growing season.

Gelemen clover, which has a strong flowering tendency, develops semi-prostrate and is moderately height (101.3 cm) depending on the growing conditions. Its stem is moderately thick and has anthocyanin. It is weak in terms of winter hardiness. The shape of central terminal leaflet is rounded, its length and width are medium. The leaf color is light green, and there is no anthocyanin. Its stem is glabrous and hollow, and leaflet margins are serrated.

The flower color of the plant is white, the ramification is dense and the number of flowers is many. The seed is multi-colored (yellowish and greenish), and shaped like oval (kidney). It produces substantial amounts of seeds (70 kg da⁻¹). The inflorescence consists of a long cylindrical or

conical flower head including many small white flowers. Average 1000-seed weight is 1.5-2 gr. Gelemen clover is open pollinated, therefore it is also a good source of nectar and pollen for bumblebees and honeybees. Because it is an aerial seeding species, the seed of gelemen clover can easily harvested using conventional machines.

Sowing can be done by hand or by spreading in October and November while the soil is tempered in the coastal part, but sowing with a seeder is recommended.

Since the seeds are very small, the sowing depth should be 1-2 cm and the row spacing should be 20-40 cm. Suggested sowing rate is between 750 gr-1000 gr/da. Fertilizer should be applied according to soil analysis.

Yörem 55 can provide excellent herbage production (7731 kg/da fresh yield-1528 kg/da dry matter) if ecological requirements are suitable and convenient management.

Yörem 55 also performs very well in terms of forage quality required for the productivity of ruminant animals.

Its forage quality is good. The crude protein and cellulose content are 15.02% and 34.40%, respectively. Also, NDF, ADF, ADL, and RFV values were calculated as 43.17%, 33.24%, 7.26%, and 119, respectively.

Although it depends on the environmental conditions in which it grows, the disease does not occur.



Figure 1. (a) Plant of *T. meneghinianum* (b) Flower (c) Seeds. (Original)

References and Notes

- Anonim, (2020). Tarla Bitkileri Tescil Komite Toplantıları, <https://www.tarimorman.gov.tr/BUGEM/TTSM/Duyuru/226/2020-Nisan-Ayi-Tarla-Bitkileri-Tescil-Komite-Toplantilari> (in Turkish, unpublished)