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## Determination of Agricultural Characteristics of Smooth Bromegrass (Bromus inermis Leyss) Lines under Konya Regional Conditions

Authors: Abdullah Özköse, Ahmet Tamkoc

**Abstract :** The present study was conducted to determine the yield and yield components of smooth bromegrass lines under the environmental conditions of the Konya region during the growing seasons between 2011 and 2013. The experiment was performed in the randomized complete block design (RCBD) with four replications. It was found that the selected lines had a statistically significant effect on all the investigated traits, except for the main stem length and the number of nodes in the main stem. According to the two-year average calculated for various parameters checked in the smooth bromegrass lines, the main stem length ranged from 71.6 cm to 79.1 cm, the main stem diameter from 2.12 mm from 2.70 mm, the number of nodes in the main stem from 3.2 to 3.7, the internode length from 11.6 cm to 18.9 cm, flag leaf length from 9.7 cm to 12.7 cm, flag leaf width from 3.58 cm to 6.04 mm, herbage yield from 221.3 kg da<sup>&ndash;1</sup> to 354.7 kg da<sup>&ndash;1</sup> and hay yield from 100.4 kg da<sup>&ndash;1</sup> to 190.1 kg da<sup>&ndash;1</sup>. The study concluded that the smooth bromegrass lines differ in terms of yield and yield components. Therefore, it is very crucial to select suitable varieties of smooth bromegrass to obtain optimum yield.

**Keywords:** semiarid region, smooth bromegrass, yield, yield components

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