

**NITROGEN EFFECTS ON YIELD AND FORAGE QUALITY OF
PERENNIAL RYEGRASS (*Lolium perenne* L.)**

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ABSTRACT

The effects of four nitrogen rates (0, 50, 100 and 150 kg ha⁻¹) on forage yield and some yield components of four perennial ryegrass (Lasso, Tetramax, Tivoli and Tove) were evaluated under the Black Sea Coastal Area Conditions in the 2002-2003 and 2003-2004 growing seasons. Nitrogen treatments significantly affected most of the yield components which were determined in perennial ryegrass. Forage yield and quality increased along with increase of nitrogen doses. Nitrogen fertilizer also increased the crude protein content in all cultivars. The highest forage, dry matter and crude protein yields were obtained from cultivar Tove (12.90, 4.25 and 0.44 t ha⁻¹, respectively) in the treatment of 150 kg per hectare nitrogen.

Key Words: *Lolium perenne* L., Perennial Ryegrass, Forage Yield, Forage Quality.