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THE EFFECTS OF INOCULATION AND NITROGEN FERTILIZATION ON FORAGE YIELD AND PROTEIN CONTENT OF SOME ANNUAL CLOVERS

(*Trifolium ssp.*)

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ABSTRACT

The effects of rhizobium inoculation and different nitrogen dose combinations (control, inoculation, 30 kg ha^{-1} N, 60 kg ha^{-1} N, 30 kg ha^{-1} N + inoculation and 60 kg ha^{-1} N + inoculation) on forage yield and quality of three annual clovers (crimson, gelemen and berseem clover) were evaluated under the Black Sea Coastal Area Conditions, Turkey, in the 2002-2003 and 2003-2004 growing seasons. The experiments were randomized block design with three replications for annual clovers, seperately. The highest forage, dry matter and crude protein yields were obtained from 30 kg ha^{-1} N + inoculation treatments in both crimson clover (18.2, 4.2 and 0.71 t ha^{-1}, respectively) and berseem clover (31.1, 6.1 and 1.15 t ha^{-1}, respectively). However, inoculation treatment gave the highest forage, dry matter and crude protein yields in gelemen clover (29.5, 5.2 and 1.05 t ha^{-1}, respectively).

Key Words: Crimson clover, gelemen clover, berseem clover, forage yield