In order to study the effect of the planting date and soybean (genotypes) on forage and yield components and other traits related to these annual medicos, an experiment was conducted in the field conditions in years of 2015 and 2016. In this experiment, three annual medicos, three levels of planting dates (20 February, 1 and 15 of March) and two levels of soybean (0 and 20 millicomma/L) were considered. Field experiment was conducted in split split plot design based on the complete randomized blocks with four replications. In field experiment, varieties were significantly different for forage and yield components and other studied traits. All pedisteppe was better than other varieties for nitrogen fixation and productivity, cost dry matter, and nitrogen amount. All pedisteppe had more ability for nitrogen fixation than other varieties. In second and third planting dates compare to first planting date, nitrogen fixation and forage production were increased in annual medic varieties due to increasing effective indices in forage producing such as leaf number and area, leaf, stem dry matter and plant height. Using genistein (0-20 millicomma/L) compared with control (0 millicomma/L) affect on melitocystis and nitrogen fixation in annual medic varieties under field conditions. This matter showed that effect genistein on affected reducing negative effect of environmental low temperatures on melitocystis and nitrogen fixation of annual medicos.

Keywords: Annual medic, Forage, Soybean, Planting date