Natural dyeing has been used for years in our country where the rich plant diversity and handcrafts are widespread. The studies on natural dyes have been accelerated since the emerged negative effects upon human health of some synthetic dyestuff. Ecology of environment, production and consumption are evaluated with the use of natural dyes has gained importance. Natural dyestuff which have various antioxidant, environmentally friendly, high perspiration and light fastness and rich color spectrum are cause of this province. In addition natural dyes are antioxidant, antibacterial, antifungal, and UV-absorbed. The use of bio-mordants in natural dyeings is highly compatible with environment in terms of waste water instead of using heavy metal-containing mordant.

In this study, with six different natural (rose, thyme, lavender, cloves, mate tea) dyes in the form of fabric produced from 100% wool fiber has been dyed in the presence of citric acid as a bio-mordant. The different plants were boiled 1 hour with extraction method (solid/liquid) and after boiled solutions were left cooled for 24 hours. The woolen samples were dyed liquid ratio of 1:10 for 1 hour at 98 C with extracted dye solutions. The dyed woolen samples were rinsed at 40 C for 10 min. After dyeing with the color measurement (K/S) and fastness of work were performed. When the gathered dyeings have assessed in terms of washing, rubbing, perspiration and light fastness, it is observed that natural dyes can be used easily on woolen fabric.