

Abstract

This paper shows the results obtained for dyeing protean fibers (wool) with carthamin, which is a natural pigment extracted from saffron flowers (*Carthamus tinctorius* L.). We aimed mainly for the optimisation of the dyeing process in terms of investigation of the quantity of natural pigment ingrained on wool fiber. The used method for this study was the multiple regression method which through data processing on computer has lead to the getting of a curve in space and in plan which allowed the establishment of optimal parametres for dyeing: pigment concentration, temperature of dyeing bath and duration of dyeing process.

Key words: : dyeing natural, carthamin, multiple regression method, protean fibres