**Abstract**
In order to establish the influence of several fertilizer rates (nitrogen, phosphorus and potassium) on the quality of flour obtained from wheat there was established a polifactorial experiment, in 2011 at Agricultural Research and Development Station Caracal on a baticalcaric cambic chernozem. This trial has analyzed the folowing quality indicators of flour: wet gluten, falling index, Zeleny sedimentation test, the index of gluten formation, glutenic index, farinograph test, alveograph test. After analyzing these indicators there resulted that a good quality flour can be obtained when moderate nitrogen rates are applied, of N100-N150 kg/ha as well as phosphorus in a rate of 80 kg/ha. The single using of nitrogen, phosphorus and potassium fertilizers do not ensure a good quality of the flour. The mixed applying of fertilizers determines a better action as nutrients and crop requirements are fulfilled. Single applying of fertilizers creates disequilibrium in plant nutrition and, as a result, the flour has poor quality.

**Key words**: flour, wheat, fertilizers, gluten