The changing of the soil reaction as a result of applying several fertilizer types

Ana-Maria DODOCIOIU, R. MOCANU, M. SUSINSKI - Universitatea din Craiova

As a result of long term applying of chemical fertilizers with different crops, the soils have changed their agrochemical features of which the most sensitive to the fertilizer applying is the soil reaction. In order to evaluate he changing underwent by the soil reaction as a result of using different fertilizer types of nitrogen with the corn and wheat crops on a typical reddish preluvosoil we have researched during 2004 and 2008 years the evolution of the soil reaction with 11 fertilized variants that were fertilized comparatively with the not fertilized control. At the begging of the experiment, in 2004, the soil reaction with all 12 researched variants was weak acid to neutral (pH 6.44 – 6.95) between variants being a variation of the pH value of 0.3-0.7% due to the soil unevenness. After 4 years of research, for all variants, the final pH was lower than the initial one. The pH variations were lower or bigger in function of the type of the fertilizer. With the not fertilized control the pH variation was of 2.16 and the soil has acidified in natural conditions.