Improving the acid soil with metallurgical slag

CIOROI Maria - Universitatea "Dunarea de Jos" Galati NISTOR-CRISTEA Licuta - S.C. DSU Romania S.R.L. Galati DUMITRESCU Cristina - Universitatea Politehnica Bucuresti

The soil represents a primordial source of existence for the mankind. This is the reason why we have to pay the necessary attention to it, either by the preservation of the wealth it provides us, either by our contribution which consists in correcting some of the anomalies that appear in time, namely the increase of its fertility degree. Consequently, on some of the soils the fertility point considerably changed because of the pollution that led to the changing of several important chemical factors for establishing the potential fertility point, such as: H of the soil, capacity of cation exchange, the saturation degree with bases, the relation carbon-azotes, the soil's salinity.

The place where the chemical factors underwent changes based on different reasons, acid soils appeared. From the studies made on soil tests taken from Galati County, it was observed that there really are quite large surfaces in which the pH of the soils got acid in time, observation that led us to the idea of undertaking researches regarding the improving of the acid soils. Thus, the steelworks slag, mechanically processed, can be considered as integrated in the category of chalking improvements, with a neutralizing power (PNA) of 95%.: CaO 38-42%, MgO 4-7%.

As it can be seen from the researches, the steelworks slag used in agriculture as a chalking improvement leads to a good mobilization of nutritive elements reserves of the soil, as well as to their storage in the soil by a long-time process.