The effect of deep loosening on crop production in the trial plot Lacu Sarat, Brăila

Valentina COTEȚ - National R & D Institute for Soil Science, Agrochemistry and Environment Protection, Bucharest

The results presented here were obtained within 1998-2004 period at the Lacu Sarat trial plot in natural conditions in the frame of the ameliorative field scheme and also the crops structure. The results are faced with the benchmark variant = 100, identified as the variant with the minimum ameliorative practices (only chemical fertilization, paraplaw tillage and amendation), due to the lack of a real benchmark variant (without ameliorative interventions). The aim of this paper is to emphasize the effect of the horizontal drainage, which is included into the ameliorative scheme of the Lacu Sarat trial plot, next to the deep loosening, ameliorative irrigation, ameliorative organic or/and mineral fertilization, plowing with or without soil material inverting, mulching, and amendment.

To help achieving the radical amelioration of the soil and a more efficient use of the land, alongside with the complex works for the amelioration of the saline and alkaline soils, during amelioration and exploitation itself, agrofitotehnical and agroameliorative measures should be applied.