



## The effect of the compost used as fertilizer upon the production of some maize hybrids

Mihail AXINTE - USAMV Iasi

Rodia CRISTEA - Caracalau, jud. Bacău

Marius ZAHARIA, Teodor ROBU, Aglaia MOGÎRZAN - USAMV Iasi

In the climatic conditions of 2005-2007 years, with higher temperatures than the multi-annual average (0.4 – 1.4 oC) and precipitations with higher values in 2005 (with 157.7 mm) and smaller in 2006 and 2007 (with 139.1 respective 220.3 mm) compared with the multi-annual average, on a gleic faeoziom soil from Caracalău, Bacău district, it was organized a experience with three factors regarding increasing dozes of compost, compared with chemical fertilization and without fertilization, at three maize hybrids (Dana, Elan and Turda SU 210) and two sowing density (48000 and 60000 germinal seeds/ha), in order to practice biological agriculture. After researches were accomplished it was observed that grain production (the average 2005-2007) had the higher value at the variant which was fertilized with 30 t/ ha compost, 6671 kg/ha, with a significant difference of 1883 kg/ha compared with the variant which was unfertilized and a difference of 939 kg/ha compared with the variant which was chemical fertilized (N160P80K80). Turda SU 210 hybrid realized the biggest production of 6671 kg/ha, with a very significant difference than the hybrids Dana and Elan, and density of 60000 germinal seeds/ha determined a significant difference of 317 kg/ha than the 48000 germinal seeds/ha. The interaction between compost 30t/ha X Turda SU 210 X 60000 germinal seeds/ha realized the higher grain production, with an average on the three years, of 6847 kg/ha.