



## Studii timp de 40 ani privind sistemul clasic și NO – TILLAGE la cultura porumbului în condițiile României

ȘARPE N. - A.S.A.S. București

MASCHIO M. - USAMVB Timisoara

POIENARU Șt. - Colegiul Universitar Agricol Călărași

In the pedo-climatic conditions of Romania, the no – tillage system can be applied to maize, soybean, wheat and barley crops on an area of at least 1 million hectares of the 10 million hectares of the country's arable land. The no – tillage system was studied for 30 years, namely in the interval 1963 – 1993 at the National Institute for Agricultural Research. In the conventional system, the maize yield was of 8.287 kg/ha, while in the no – tillage system the yield was 8.561 kg/ha – so the yields in the two cases were almost the same, but there were big differences in terms of fuel consumption. In the period 2005 – 2007 the no – tillage system was studied in Societatea Agricolă Agrofam on maize crops. The average value of the yields obtained in the 3 years by applying the conventional system was of 9.980 kg/ha and, by applying the no – tillage system, the yield was 10.139 kg/ha (the crops being irrigated), so the yields obtained were practically the same. Yet there were big differences in terms of fuel consumption and mechanical work expenses. The fuel consumption in the conventional system was of 96 l /ha. As for the other mechanical works, there were also big differences, these expenses amounting to 1435,0 ron/ha in the conventional system and to only 373,0 ron/ha in the no – tillage system.