Noi rezultate privind sistemul de cultură NO-TILLAGE aplicat la soia modificată genetic, cultivată în condiţiile din Lunca Dunării

ŞARPE N. - A.S.A.S. Bucuresti
POIENARU Şt. - Colegiul Universitar Agricol Călăraşi
MASCHIO M. - USAMVB Timisoara

In the interval 2004 – 2008 a series of experiments were made with the no-tillage system applied to modified soybean crops cultivated on the pedooclimatic conditions from the Danube River meadow. The soil is
aluvionary and it contains 2,5 – 4,0% humus and 28 – 34% clay. In all these years the soybean was cultivated after maize crops. The maize was harvested by Class combine equipped with a chopper for the maize plant stalks. The no – tillage was compared with the conventional system. In the conventional system, in the autumn, after the maize was harvested, the land was ploughed 28 – 30 cm de3ep. In spring, two tilling operations were performed, namely disking + harrowing. The soybean was sowed by the Romanian made STC-8 sowing machine. After the soybean plant had sprouted, 3 mechanical hoeing runs were performed during the rows, followed by 3 manual hoeing runs along the rows. In the no – tillage system there was no ploughing, the soybean was sowed directly in the post maize crop stubble field by means of a Massey – Fergusson sowing machine. After the soybean had sprouted, the annual and perennial weed control was performed by applying the Roundup Ready, which contains 360 g/litre glyphosate. In all these years, the soybean yield was practically equal in both technological systems, conventional and no – tillage. Nevertheless, there were great difference in terms of fuel consumption. In the conventional system, a fuel 79 – 103 litres per hectare was recorded, whereas in the no – tillage system the consumption recorded was much smaller, namely 12 – 23 litres per hectare. Based on the results obtained in the 4 years when the tests were run, the general conclusion was drawn that the no – tillage system is more economic and profitable than the conventional system.