# The influence of soil rolling time and methods on sugar beet seedbed formation

K. ROMANECKAS, E. SARAUSKIS - Lithuanian University of Agriculture, Kaunas

In 1998, 1999, 2002, 2004 the influence of soil rolling before and after sugar beet sowing on sugar beet seedbed, soil physical properties, sugar beet seeds germination, yield and quality of roots was investigated at the Experimental Station of Lithuanian University of Agriculture. The soil was rolled with complex and spur rollers. In 2004 three depth types of seedbeds: shallow, moderate, deep were formed. Soil rolling variants were still the same.
According to the data of investigations, the seedbeds increase to the density of 0,07 – 0,10 g cm-3 had no negative influence on soil moisture evaporation and structure stability.
In sufficient soil moisture situation the best germination of sugar beet seeds was observed in the soils, rolled with complex roller before sowing – 67,6 %. Therefore, the highest quality yield of roots (57,9 t ha-1) and white sugar (8,64 t ha-1) was received having rolled seedbed with spur roller after sugar beet sowing.
Presowing soil tillage depth and rolling time or methods had significant influence on sugar beet germination in non-sufficient soil moisture situation.