SESSION 4:

MECHANICAL WEED CONTROL – HOW FAR CAN WE GET? / DÉSHERBAGE MÉCANIQUE – JUSQU'OÙ PEUT-ON ALLER? / MECHANISCHE UNKRAUTBEKÄMPFUNG – WAS KÖNNEN WIR ERREICHEN?

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STATE OF PLAY AND PERSPECTIVES OF USE OF MECHANICAL WEED CONTROL IN SUGAR BEET CULTIVATION

ABSTRACT

Since 2007, I'ITB launched or developed several programs in order to study the possibilities of reducing uses of herbicides which contribute to more than 50% of total use of pesticides in sugar beets in France. Among those projects, mechanical weed control as a complementary tool to herbicides has been particularly studied. Different types of equipment are under investigation:

- Conventional hoes, using different kinds of steering systems including GPS RTK systems;
- Band spraying combined with classical hoeing using diverse systems to guide the machines
- Rotary hoe and 'rubber stars' directly on the row once the beets are over 4 true leaves stage

After eight years of study, it is possible to establish the benefits and constraints of using these materials as technical, economic than environmental but also to assess the degree of ownership of these technologies by farmers.