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INTEGRATED WEED CONTROL IN SUGAR BEETS IN STRIP TILLED AND PLOUGHED CROPPING SYSTEMS

**Gestion intégrée d'adventices dans la culture de la betterave sucrière dans les
systèmes de strip-till et de labour / Integrierte Unkrautkontrolle im
Zuckerrübenanbau in Streifensaat- und Pflugsystemen**

ABSTRACT

An update on the recent and ongoing activities within development of a strip tillage technique in clay soils will be given. This technique is based on several passes with relatively light machinery. The first pass is performed in a growing catch crop in August and followed by a second pass in October, where the main focus is tillage to 10-15 cm depth and creation of right surface with little plant material, to improve seed bed preparation. In spring, special equipment has been constructed to create a seed bed suitable for sugar beets.

Further, the effect of tillage (strip tillage versus ploughing, both with two types of seed bed) and catch crops (white mustard, rye) on weed emergence has been studied. Strip tillage had a large effect by reducing weed emergence to around 1/2-1/4 compared to a ploughed system. The effect of catch crops appeared to be minor, but this may also be due to little biomass production of the catch crop in the actual years.

Results of emergence and growth of both sugar beets and weed will be given and it will be discussed – based on preliminary results – whether tillage and catch crop growing can be used as an IPM-tool.
