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DIFFERENT COVER MATERIALS ON SUGAR BEET GROWING

Effets de différents matériaux de paillage sur la croissance de betteraves sucrières / Auswirkung verschiedener Abdeckmaterialien auf das Zuckerrübenwachstum

ABSTRACT

Spring conditions are usually harsh on Finnish sugar beet growing areas. The soil temperature during the drilling is low and the possibility of night frost is high during the first month of seedling emergence. To increase the sugar yields in these conditions and to stabilize the micro climate of the small plant stands, different cover materials were tested on sugar beet growing in Finland during 2013. The materials tested in cover trial were light white polyester cover (control), biodegradable plastic and three different paper materials. The paper materials were two black papers and one brown paper. The basic control was left without the cover. The paper covers and bio plastic were applied during the drilling and the polyester cover was set after the drilling. Together with the bio plastic and paper materials also soil herbicide treatment was applied underneath the cover. Results with the paper materials were not promising. Some of the papers were too thick and did not pass water. One paper material had quality to breakdown after first rain and it might be interesting to continue to work with. Bio plastic does not break down easily enough, but when small holes were done during the drilling the plants developed better underneath it. Best results were with light polyester cover.