

3.4 SAKARI MALMILEHTO, MARJA TURAKAINEN, SUSANNA MUURINEN  
Sugar Beet Research Centre, Toivonlinnantie 518, FIN – 21500 Piikkiö

## **EFFECT OF STARTER APPLICATION OF PHOSPHORUS ON YIELD**

### **ABSTRACT**

The sugar beet drilling in Finland is usually done in conditions where the soil contains sufficient amount of moisture, however the soil temperature is usually very low. In these northern growing conditions the total growing period is short, approximately 160 days so everything that can be done to improve sugar beet growth should be adopted to farming practise. Finland is also very regulated with the use of phosphorous so it is crucial that the fertilizers that are used are used properly.

Aim of this study was to improve yields with starter application of phosphorous. The studies were done on years 2012-2015 on soils with different P-levels. One with  $<23 \text{ mg P l}^{-1}$  and other with  $>23 \text{ mg P l}^{-1}$ . On this study liquid fertilizer were used with three different doses:  $0 \text{ kg P ha}^{-1}$ ,  $5 \text{ kg P ha}^{-1}$  and  $10 \text{ kg P ha}^{-1}$ .

It was shown that with these starter applicatios of phosphorous it is possible to increase root and sugar yield.

---