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### **SUGAR LOSSES AND EFFECT ON BEET QUALITY AFTER DIFFERENT CLAMP COVERING CONCEPTS IN SWEDEN**

**Conséquences de différentes conceptions de bâchage de silos sur les pertes en sucre et la qualité de transformation de betteraves sucrières en Suède /  
Auswirkung verschiedener Konzepte der Mietenabdeckung auf Zuckerverluste und die Verarbeitungsqualität von Zuckerrüben in Schweden**

#### **ABSTRACT**

Different clamp covering concepts were studied during the campaigns 2011 - 2013. Each "treatment" was a 20 m long part of the same clamp located near Örtofta factory in Sweden.

Beets were conventionally harvested in the first half of November, directly unloaded, forming a clamp with about 2.5 m height and 8 tons of beet/m, stored for around 60 days before loading with a cleaner loader and delivered to the factory in the first half of January.

The five covering concepts included chopped straw and TopTex®. Both were tested alone and in combination with other more or less wind proof materials, among others the plastic material Jupette® from Belgium.

Ingoing beet quality was measured. The clamp was equipped with temperature loggers in each treatment during the storage period, accessible for all growers via Internet.

Temperature loggers were placed in each treatment at seven different places in clamp, five in the outer part and two in the inner part. At delivery, beets from the seven logger places were visually scored, sampled in boxes and analyzed for sugar content, cleanness, amino-N and K+Na. The Swedish system for quality remarks were applied on the samples.

When necessary, frost damaged beets were removed, weighed and analyzed separately before delivery to factory. All beets were delivered as farmer delivery with an increased sampling frequency.

Sugar losses are calculated, possibilities and limitations are evaluated and practical recommendation are given.