TUVESSON, STIG¹, BENSEFELT, JAN¹, TENNING, PAUL¹, and SIMANTEL, GERALD², ¹Hilleshög AB, P.O. Box 302, S-261 23 Landskrona, Sweden, and ²Hilleshög Mono-Hy Inc., 11939 Sugarmill Road, Longmont, Colorado 80501. Yield trials with Roundup Ready™ sugar beet.

During extensive tolerance tests, different transgenic sugarbeet lines with high tolerance to the herbicide Roundup® (active ingredient glyphosate) have been identified. The tolerance genes are crossed into Hilleshög NK conventional elite MS's and pollinators. When introducing the gene into a wide range of sugar beet lines, also including special disease tolerance traits such as Rhizomania-T, Cercospora-T, Nematode-T and Curly Top-T, there will be varieties adapted for different geographical areas, to the coming market introduction.

Several field trials were performed during 1996. Yield trial results from France (2 locations), UK, Denmark and USA will be presented. Data from previous years have shown that breeding of Roundup ReadyTM varieties have reached the same level, in yield and quality, as the best conventional varieties.