



Agricultural Journals

Research in

**AGRICULTURAL
ENGINEERING**

home **page** about **us** contact

us

Table of Contents

IN PRESS

RAE 2013

RAE 2012

RAE 2011

RAE 2010

RAE 2009

RAE 2008

RAE 2007

RAE 2006

RAE 2005

RAE 2004

RAE 2003

RAE Home

**Editorial
Board**

For Authors

- **Authors Declaration**
- **Instruction to Authors**
- **Guide for Authors**
- **Copyright Statement**
- **Submission**

For Reviewers

- **Guide for Reviewers**
- **Reviewers Login**

Subscription

Res. Agr. Eng.

R. Rybář

External factors and their impact on the

metabolism and technological quality of stored sugar beet

Res. Agr. Eng., 50 (2004): 81-87

Technological quality of sugar beet is a complex of biological, chemical, physico-chemical and mechanical properties of the sugar beet root, which are conclusive to decide upon a proper warehousing and subsequent processing of the crop aimed at reaching a maximum yield of white refined sugar (raffinade). It is affected by a number of external and internal factors of the field during the growing season and during the post-harvest storage. This particularly applies to sugar beet meant for sugar factory processing in the months of November and December, i.e. to about 40–60% of total sugar beet crop harvested in the Czech Republic. Having been lifted at the end of vegetation, the root still remains to be a living organism with its specific metabolism which can be characterized by a high loss of bioenergy the size of which can be influenced not only by the harvest quality as expressed by the rate of surface damage to the roots, but also by weather factors such as alternating temperatures, solar radiation intensity, precipitations, etc. For this part of the production it is necessary to adopt measures that would minimize the loss of sugar beet roots weight and technological quality