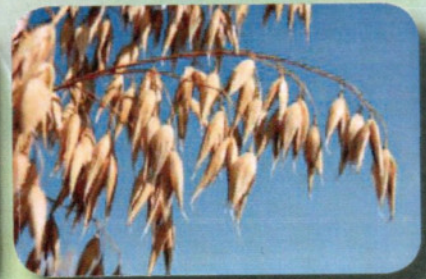


# Pre-breeding - fishing in the gene pool

Book of abstracts



European Plant Genetic  
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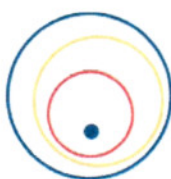
Section Genetic Resources

## **Pre-breeding - fishing in the gene pool**

European Plant Genetic  
Resources Conference 2013

*10-13 June, 2013*

**Abstracts of oral presentations  
and posters**



**NordGen**  
Nordic Genetic Resource Center



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

# Nutritional value of Latvian Origin triticale, barley and potato

poster p3-13

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The aim of the study was to evaluate the influence of growing technology on yield quality traits of Latvian origin winter triticale, spring barley and potato. Field trials were arranged with four winter triticale, six spring barley and 12 potato genotypes under conventional and organic growing conditions at State Priekuli Plant Breeding Institute from 2010 to 2012.

For triticale, three different fertiliser rates were applied in the conventional field and two seeding rates were applied in the organic field. Quality traits of the yield as 1000 grain weight, protein and starch content, volume weight, falling number, as well as amount of amino acids were detected.

For barley, three different fertiliser rates were applied in the conventional field. Different seeding rates were applied for some barley genotypes under both growing conditions. Quality traits of the yield as 1000 grain weight, content of protein, starch and  $\beta$ -glycan, as well as amounts of Fe, Zn, tocopherols and amino acid lysine were detected.

For potatoes, two different fertiliser rates were used in the conventional field. A tuber yield and content of starch, as well as of vitamins A, B<sub>1</sub> and C in tubers were detected.

The study was performed with financial support of Latvian State Research Programme NATRES FOOD (2010–2013).

**Key words:** yield quality, triticale, barley, potatoes