

# The Second North and East European Congress on Food

## BOOK OF ABSTRACTS

26-29 MAY 2013

NIET Kyiv Ukraine

THE SECOND NORTH AND EAST EUROPEAN CONGRESS ON FOOD

# NEEFood - 2013

## Kyiv

May 26-29, 2013

Organized by:



National University  
of Food Technologies

and



Association  
«Higher Educational Institutions and  
Enterprises of Food Industry  
UkrUFoST»

## BOOK OF ABSTRACTS

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The congress addressed the following topics:  
Food expertise and safety

Novel Systems for Food Chain  
Natural Bioactive Compounds, Functional and Traditional Food Products  
Global challenges and competitiveness

Recommended for teaching staff, engineering and technological personnel, managers of food industry

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Новітні системи в харчовому ланцюзі  
Натуральні біоактивні сполуки, функціональні та традиційні харчові продукти  
Глобальні виклики та конкурентоспроможність

Для викладачів, наукових працівників, інженерно-технічного складу та керівників підприємств харчової промисловості

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## IMPROVING OF OAT MALT TECHNOLOGY

Nina Yemelyanova, Roman Mukoid

*National University of Food Technologies, 68, Volodymyrska Str., Kyiv, 01601, Ukraine, Mukoid\_Roman@ukr.net*

Promising direction in the development of health food from germinated cereals is highly efficient selection of new varieties of oats, which are characterized by high yields and processing. Solving this problem is relevant, because it allows to obtain new kinds of competitive products with high nutritional value.

It is known that refined grain oats have dietary properties, because of their valuable chemical composition. The optimal ratio of carbohydrates, proteins, amino acids, fats, minerals and vitamins makes grain oats valuable raw material for various food products, including those with health properties.

Sensory, physiological, physical, chemical and biochemical indices of different varieties of oats and their changes during malting were investigated. It was found that bare-grained oats, compared with filmy oats, have significant advantages.

For the malting process an experimental malting setting was designed and constructed which can be used for germination of different cereals.

It was also found that during malting of bare-grained oat content of biologically active substances increases significantly. Thus the content of fats and proteins decreases. Optimal technological parameters of bare-grained oats malting are as follows: temperature with a gradual increase from 14 to 17 ° C, humidity 41...42 %, duration 4...4,5 days.

Technological instruction «Production of malt of bare-grained variety of oat» TI 0207092010:38105 developed on the basis of the results and also tested under production conditions of PE «Neretin I.M.

Under production conditions several parties of oat malt were produced from bare-grained oats.

From the resulting malt in SPC «Ukrpektyn» a batch of polymalt extract «Polisol» was prepared. Using malt of bare-grained oats instead of malt of filmy oats increases the output of finished product by 10%.

**KEY WORDS:** oats, filmy, bare-grained, malt, malting, extract, biologically active substances