



The First North and East  
European Congress on Food

# NEEFood - 2012

April 22 -24, 2012

St. Petersburg, Russia

Book of Abstracts



Organized by:

and



in cooperation with:



# NEEFood - 2012

April 22-24, 2012  
St. Petersburg, Russia

Organized by:



and



RUSFoST

St. Petersburg State  
Institute of Technology  
(Technical University)

In cooperation with:



T. DELGADO, J. A. PEREIRA, S. CASAL AND E. RAMALHOSA Drying Behaviour  
Of Two Chestnut Fruits (*Castanea Sativa* Mill.) Varieties.....127  
A. CÂNDIDA SILVA, P. BAPTISTA AND E. RAMALHOSA. Drying Behavior Of The  
Marketed Mushrooms *Lactarius Deliciosus* And *Agaricus Bisporus*.....128

terms of colour, no differences were observed along the drying time but the mean values of  $L^*$ ,  $a^*$ ,  $b^*$  of Longal were always lower than those obtained with Judia. These data indicate that convective drying can be regarded as an industrial preservation alternative, with apparently reduced differences between both varieties.

#### DRYING BEHAVIOR OF THE MARKETED MUSHROOMS *LACTARIUS DELICIOSUS* AND *AGARICUS BISPORUS*

Ana Cândida Silva<sup>1</sup>, Paula Baptista<sup>1</sup> and Elsa Ramalhosa<sup>1</sup>

*Mountain Research Centre (CIMO), ESA- Polytechnic Institute of Bragança, Campus de St<sup>a</sup> Apolónia, Apartado 1172, 5301-854 Bragança, Portugal & ana\_88silva@hotmail.com; pbaptista@ipb.pt; elsa@ipb.pt (1)*

Wild edible mycorrhizal mushrooms have great commercial importance, as well as beneficial properties, linked to their nutritional value, delicacy and flavor. *Lactarius deliciosus* is appreciated worldwide, being frequently used in the preparation of several culinary dishes. On the other hand, *Agaricus bisporus* is a commercial mushroom also quite used. However, mushrooms are extremely perishable and shelf life of fresh mushrooms is very short. Therefore, they are frequently processed, being dehydration one of the possible preservation methods.

The aim of the present work was to compare the forced convective hot-air drying of *L. deliciosus* and *A. bisporus* in respect to their drying kinetics. Slices of both species were obtained, immediately weighed and placed into Petri dishes. Afterwards, these slices were hot-air dried at 45°C, being samples removed and weighted at regular interval of times. Moisture contents, drying rates and moisture ratios were determined.

*L. deliciosus* and *A. bisporus* had  $92.64 \pm 0.58\%$  and  $89.21 \pm 1.90\%$  initial moisture contents (wet basis). It could be seen for both species that moisture removal was very fast at the beginning of the drying process, having the drying rate slowed down as the drying had proceeded. Some differences were detected between both species. 36 minutes were necessary to achieve a final moisture content of 1 g water/g dry matter with the *A. bisporus*, on contrary to the 70 minutes needed for the *L. deliciosus*. In order to simulate the drying behavior of these species, the suitability of some mathematical models was determined by statistical analysis. Adjusted  $r$ -squares higher than 0.95 were obtained.

# 1st North European Congress on Food NEFood - 2012

---

This letter confirms that Mrs. ELSA RAMALHOSA participated in the 1st North European Congress on Food NEFood – 2012 held on 22-24 April 2012 in St. Petersburg, Russia.

President NP «RUSFoST»



Shamtsyan MM

---

Legal address: 191011 Russia, St. Petersburg, Italian street, house 16/19, letter A room 7H  
Юридический адрес: 191011, Россия, г. Санкт-Петербург, ул. Итальянская, д. 16/19, лит. А, пом. 7H  
Postal address: 191123 Russia, St. Petersburg, Zakharyevskaya street, house 27, apartment 43  
Почтовый адрес: 191123, Россия, г. Санкт-Петербург, ул. Захарьевская, д. 27, кв. 43