

BACKGROUND

Brazil nuts represent one of the most important non-timber forest products of extractivist exploration in the Amazon region of Brazil, Bolivia and Peru. The nuts are collected as windfalls from wild growing trees (*Bertholletia excelsa*) during the rainy season and subject to minimal processing for the local or export market either in shell or shelled (as a kernel).

Nevertheless, the Brazil nut production chain is confronted with problems of infection of the nuts with aflatoxin producing moulds leading to aflatoxin contamination. Such contamination is of major concern not only for public health because of the carcinogenic and genotoxic effects of aflatoxins in human beings, but also in regard to economic losses and environment impact. It constitutes the largest obstacle to Brazil nut commercialisation, especially in Europe where the regulation on aflatoxin levels is very stringent.

In Brazil, Peru and Bolivia, a series of actions were undertaken by their respective governments, research institutes, universities and Non-Governmental Organizations among others, for preventing and controlling the occurrence of aflatoxins in Brazil nuts in order to attend to the international sanitary standards and consolidate the export markets.

The Safenut project (June 2006-November 2008) that was approved by the STDF program (<http://www.standardsfacility.org>) aims to support and reinforce these actions by validating and transferring to the key stakeholders of the Brazil nut production chain a sustainable and effective aflatoxin management system. The specific objectives of the project concern:

1. Characterization of the Brazil nut production chain, and formulation of organizational and incentive strategies for safety control;
2. Validation of recommended good practices in the Brazil nut production chain for aflatoxin control;
3. Validation and implementation of a rapid aflatoxin surveillance system for use along the Brazil nut production chain;
4. Knowledge and technology transfer to the key stakeholders;
5. To strengthen the public-private dialogue and partnership in the Brazil nut sector.

OBJECTIVES

- To disseminate and report all the results and conclusions generated by the Safenut project to the regional and international community;
- To present the actions and results of other key R&D projects for Brazil nut aflatoxin prevention and monitoring;
- To present the current state of the Brazil nut production chain and aflatoxin control in the other producing countries (Bolivia and Peru);
- To discuss how the results of the Safenut project can be incorporated into the Brazil nut production chain;
- To facilitate the dialogue and collaboration between the private and public sectors.

TARGET PUBLIC

- Key entities and stakeholders of the Brazil nut production chain from Brazil, Peru and Bolivia;
- The private sector (producers/extractivists, processors...);
- Government authorities and their services (technical assistance, rural extension, etc.);
- Non-Government Organizations;
- Scientific community including universities and research centres;
- Regulatory authorities;
- Official institutes as the national linking with European Union.

ORGANIZERS



Centre de coopération internationale en recherche
agronomique pour le développement (CIRAD), France



National Food Administration (NFA), Sweden



Ministério da Agricultura, Pecuária e
Abastecimento (MAPA), Brazil



Empresa Brasileira de Pesquisa
Agropecuária (EMBRAPA), Brazil



Centre Science Laboratory (CSL), United Kingdom



R-Biopharm AG, Germany

WITH THE SUPPORT OF:

The STDF (Standards and Trade Development Facility)
program:



ORGANIZATION COMMITTEE

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<http://www.stdf-safenutproject.com/>

FINAL WORKSHOP:

**“Effective aflatoxin management
in the Brazil nut production chain
for recovering and consolidating
export markets”**



**6-7 November 2008, Belém, State of Pará, Brazil
- Hotel Beira Rio –
Avenida Bernardo Sayão, 4804**

PROGRAM

Thursday 6 of November, 2008

08.15 - 09.00	Registration
Opening Ceremony	
09.00 – 09.30	Catherine Brabet – CIRAD, Safenut general coordinator Monica Olsen – NFA, Safenut scientific coordinator Inácio Afonso Kroetz, Secretary of SDA/MAPA Cláudio José Reis de Carvalho, Director of EMBRAPA Belém
Part I : Results and conclusions of the STDF Safenut project	
09.30 -10.10 (40 min)	Background and objectives of the STDF Safenut project Catherine Brabet, CIRAD
10.10 – 10.30	Coffee break
Session 1 : Methods for aflatoxin and fungi monitoring along the Brazil nut production chain Moderator: Julian Smith, CSL	
10.30 – 11.15 (45 min)	Rapid methods for aflatoxin monitoring in Brazil nuts (method, validation for Brazil nut and training courses) Dan Kaplan, R-Biopharm AG and Eliene Alves dos Santos, LANAGRO-MG/MAPA
11h15 – 11.30 (15 min)	Simple method for monitoring aflatoxin producing fungi in Brazil nuts (method, quality assurance and training courses) Monica Olsen, NFA
11.30 – 11.50	Questions
11.50 – 13.30	Lunch
Session 2 : Critical control points and factors for aflatoxin production in the Brazil nut production chain Moderator: Cleísa Brasil da Cunha Cartaxo, IMAC	
13.30 -14.10 (40 min)	Aflatoxin occurrence in the Brazil nut production chain in the state of Pará Catherine Brabet, CIRAD
14.10 -14.50 (40 min)	Aflatoxin occurrence in the Brazil nut production chain in the state of Acre Felicia Maria Nogueira Leite, UFAC / SEAPROF
14.50 -15.10	Coffee break
15.10 -15.50 (40 min)	Development of a predictive model for aflatoxin production and fungal growth in the Brazil nut production chain Mats Lindblad, NFA
15h50-16h10	Questions

Session 3 : Major constraints and opportunities in the Brazil nut production chain for aflatoxin control Moderator: Marie-Gabrielle Piketty, CIRAD	
16h10 -16.50 (40 min)	Case of the Brazil nut production chain in the state of Pará Janaina Diniz, PhD UnB
16.50 - 17.30 (40 min)	Case of the Brazil nut production chain in the state of Acre Márcio Muniz, EMBRAPA Acre
17.30 – 17.50	Questions
17.50 – 18.30	Poster session and time for informal discussion among participants.
19:30	Cocktail party

Friday 7 of November, 2008

Session 4 : Recommendations for aflatoxin control in the Brazil nut production chain Moderator: Eloísa Dutra Caldas, UnB/GTFAC-CCAB	
9.00 – 9.30 (30 min)	Technical recommendations for the prevention and control of aflatoxins in the Brazil nut production chain Monica Olsen, NFA
9.30 – 10.00 (30 min)	Formulation of organizational and incentive strategies for a sustainable and safe Brazil nut production chain Jair Santos, EMBRAPA Belém
10.00 – 10.20	Questions
10.20 – 10.40	Coffee break
Part II : Experience from other countries & research projects	
Session 1 : Experience from other Brazilian R&D projects Moderator: Ricardo Raski, SDA/MAPA	
10.40 – 11.00 (20 min)	Segregation and Modified Atmosphere Packaging in the Brazil nuts Aflatoxin prevention Ariane Mendonça Pacheco, University of Amazonas - Faculty of Pharmacist Sciences
11.00 – 11.20 (20 min)	ITAL activities on fungal characterization and aflatoxin production in Brazil nuts Marta Taniwaki, ITAL
11.20 – 11.40 (20 min)	Analytical tools for the guarantee of Brazil nut quality and safety - Conforcast project Eugenia Vargas, LANAGRO-MG/MAPA
11.40 – 12.00	Questions
12.00 – 13.30	Lunch

Session 2 : Experience from other Brazil nut producing countries Moderator: Virginia de Souza Álvares, EMBRAPA Acre	
13.30 – 14.00 (30 min)	Present state of the Brazil nut production chain and aflatoxin control in Peru Pierre Zaya, Candela Peru
14.00 – 14.30 (30 min)	Present state of the Brazil nut production chain and aflatoxin control in Bolivia Evangelina Jurado, Tahuamanu SA
14.30 -14.50	Questions
14.50 – 15.10	Coffee break
Discussion Moderators: Catherine Brabet, CIRAD and Monica Olsen, NFA	
15.10 -16.40	How will the Safenut results be incorporated to the Brazil nut production so that the product quality is improved and the EU market regained? With the contribution of the workshop participants and inputs from Frans Verstraete, European Commission representative Notes will be taken by Mats Lindblad, NFA and a synthetic document prepared.
Closing ceremony	
16.40 – 17.00	Catherine Brabet, CIRAD and Monica Olsen, NFA Ademir Conceição Carvalho Teixeira, Superintendent of SFA-PA/MAPA Francisco Ailton Nogueira, Coordinator of LANAGRO-PA/MAPA Judson Ferreira Valentim, Director of EMBRAPA Acre