



Strategies and methods to detect and quantify mammalian tissues in feedingstuffs.

Keywords : BSE, mad cow, feedingstuffs, sample bank, classical microscopy, NIRS, NIRM, PCR.

A consequence of the “mad cow” epidemic emerged in the early 1990s, was the Commission Decision 94/381/EC of 27 June 1994¹ (amended several times²) stating the prohibition of the use of proteins derived from all mammalian tissues in feedingstuffs destined for ruminants. After the re-emergence of the crisis at the end of 2000, the European Commission has decided to extend this ban to other animal feeds and ingredients. By the Council Decision 2000/766/EC of 4 December 2000³, processed animal proteins (meat and bone meal, meat meal, bone meal, blood meal, dried plasma and other products) are totally banned in feedingstuffs destined to farmed animal which are kept, fattened or bred for the production of food. In June, the Commission has decided to prolong the ban⁴ and to apply it also to exports⁵.

To contribute to the development of new tools and methods for the detection and the quantification of meat and bone meal in the feedingstuffs, the European Project STRATFEED (STRATFEED.CRAGX.FGOV.BE _____) has been launched since the 1st January 2001 in the frame of the Measurement and Testing generic activity of the GROWTH programme (FP5). The STRATFEED consortium is coordinated by the Agricultural Research Centre of Gembloux in Belgium and gathers *10 partners* including official laboratories, research centres, universities and one private company (CRAGx, FUSAGx, ISS, IHCP-JRC, LAGC-GENCAT, NUTRECO, RIKILT, ROLT-CMLAG, SAC, UCO.) from 5 EU countries. The RTD STRATFEED project includes the constitution of a European sample bank of authentic animal derived ingredients and feed samples, the improvement of the efficiency of the existing official method (i.e. Classical microscopy), the development and validation of new methods based on alternative techniques (i.e. Polymerase Chain Reaction (PCR), Near-infrared spectroscopy (NIRS), Near-infrared microscopy (NIRM)) and the

¹ European Commission. (1994). Commission Decision 94/381/EC of 27 June 1994 concerning certain protection measures with regard to bovine spongiform encephalopathy and the feeding of mammalian derived protein. Official Journal L 172, 07/07/1994 p. 0023-0024.

² European Commission. (1999). Commission Decision 99/129/EC of 29 January 1999 amending for the second time Decision 94/381/EC concerning certain protection measures with regard to bovine spongiform encephalopathy and the feeding of mammalian derived protein. Official Journal 99/129/EC

³ European Commission. (2000). Council Decision 2000/766/EC of 4 December 2000 concerning certain protection measures with regard to transmissible spongiform encephalopathies and the feeding of animal protein. Official Journal L 306, 07/12/2000 p. 0032-0033.

⁴ http://europa.eu.int/comm/dgs/health_consumer/library/press/press151_en.html

⁵ Speech of David BYRNE : “The importance of having comprehensive safety legislation on BSE in place by David Byrne, Meeting of the Ministers of Agriculture of the CEFTA. http://europa.eu.int/comm/dgs/health_consumer/library/speeches/speech115_en.pdf

constitution of European databases. The STRATFEED project will be spread over 42 months.

The Kick-off meeting of the STRATFEED project was held in Gembloux on the 12th January 2001. Presently the activities of the project are centred around -a- the constitution of a European sample bank including ingredients and feedingstuffs of different sources and countries, -b- the preparation of samples according to specific heat-treatment for the development of PCR methods, -c- the preparation of feed samples spiked with MBM at different levels to develop and test the different methods and -d- the development and validation of the different methods.

For more information, contacts can be taken with :

- Pierre DARDENNE, Head of Quality Department of Agro-food Products in the Agricultural Research Center of Gembloux, Stratfeed project coordinator, tél.: + 32.81.62.03.54, fax: + 32.81.62.03.88; e-mail: dardenne@craqx.fgov.be
- Dyanne BENNINK, Scientific Officer of the European Union, Stratfeed project officer, tél.: + 32.2.295.91.83; fax: + 32.2.295.80.72; e-mail: dyanne.bennink@cec.eu.int