

PROJECTFICHE (C59)**BILAT CHINA (Call' 010) PROJECTFICHE "MYCOTOXINS"****Mycotoxins and mycotoxigenic fungi in China: analytical tools, dietary exposure and Fusarium diversity.**

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FRAMEWORK AND SIGNIFICANCE OF THE PROJECT

The major aim of this proposal is to bring together experts from both China and Belgium to conduct research on mycotoxins and mycotoxigenic fungi, including Fusarium and related toxins. The different partners will be complementary as they are focused on different aspects of this research topic. More specifically, the project will have the following objectives:

- Development of analytical tools to assess mycotoxin dietary exposure in China.
- Study on the genetic and mycotoxigenic diversity of Fusarium on wheat, maize and banana in China.

SPECIFIC TASKS

Workpackage 1 Survey of Chinese food samples to assess mycotoxin dietary exposure (WP leader: UGent and Shanghai FDA; partners: CODA-CERVA, SJTU/SAAS):

WP1.1 Transfer of expertise on liquid chromatography-mass spectrometry (LC-MS/MS) from Belgium to China

WP1.2 Collection and analysis of food samples

WP1.3 Set-up of LC-MS/MS proficiency test

Workpackage 2 Genetic and mycotoxigenic characterization of Fusarium species on wheat, maize and banana (WP leader: UCL and HZAU; partners: Hogent, CODA-CERVA, SJTU/SAAS, CATAS, UGent):

WP2.1 Collect missions in China

WP2.2 Preservation of Fusarium isolates in the BCCMTM /MUCL collection

WP2.3 Identification and characterization of Fusarium species

WP2.4 Mycotoxin biosynthesis pathway

WP2.5 Comparison and/or integration of the data obtained during the 1st project (2008-2011)

Workpackage 3 Development and evaluation of rapid mycotoxin tests (WP leader: CAU and UGent; partners: SJTU/SAAS, CODA-CERVA, Shanghai FDA):

WP3.1 Development of enzyme-linked immunosorbent assays (ELISA) and lateral flow dipstick tests

WP3.2 Evaluation of commercial mycotoxin ELISA test kits

Workpackage 4 Production of reference materials (WP leader: CODA-CERVA and SJTU/SAAS; partners: UCL, Shanghai FDA, CAU, UGent)

Workpackage 5 Organisation of workshops in Belgium and China (all partners):

WP5.1 Workshop organised in China

WP5.2 Workshop organised in Belgium