DETERMINATION OF OCHRATOXIN A IN PAPRIKA

Regulations for paprika:
Europe (EC 594/2012) : 30µg/Kg until 31.12.14 then 15µg/Kg

PROTOCOL OF PURIFICATION

Sample preparation

10g of paprika are shaken during 30 minutes with 100mL of $NaHCO_3$ 1% in water. The extract is centrifuged for 30 minutes at 4000 rpm at room temperature then filtered through a filter paper.

25mL of the extract is diluted with 25mL of HCl solution pH=1, 0.1M. After a filtration through a filter paper, this solution is used as the loading solution.

Purification with a 3mL/100mg AFFINIMIP® SPE Ochratoxin A cartridge

Equilibration
- 4mL Acetonitrile
- 4mL Water

Loading
- 4mL of loading solution (eq. 1g sample)

Washing of interferents
- 7mL 60/40 HCl solution pH 1, 0.1M/ACN

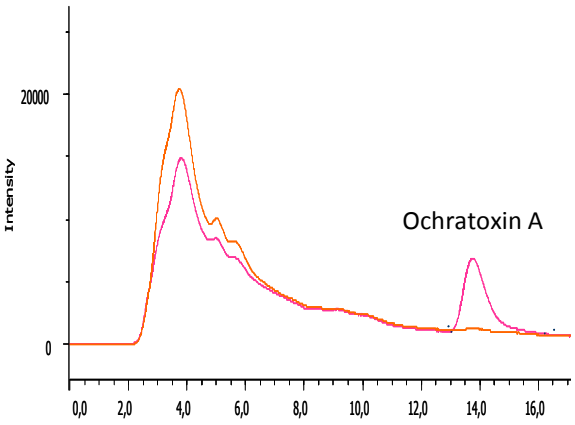
Elution (E)
- 2mL Methanol – 2% Acetic acid

The elution fraction was then evaporated and dissolved in water before HPLC analysis.

HPLC Method with Fluorescence detection

Column: Hypersil Gold C18 column 150mm x 2.1mm
Mobile phase: water/acetic acid/MeOH (39/1/60, v/v)
Flow rate: 0.2mL/min
Fluorescence detection: excitation/emission wavelengths: 333 / 460nm
Injection volume: 20µL.

RESULTS



Chromatogram obtained after purification of paprika (spiked at 30µg / kg (pink) or not contaminated (orange)) with AFFINIMIP® SPE Ochratoxin A

Recoveries of Ochratoxin A after AFFINIMIP® SPE Ochratoxin A Clean-up in paprika (n=4).

C° (µg/kg)	Recoveries %	% RSD
30	93.3	3.4

Catalog number:
FS101-02 for 25 cartridges
FS101-03 for 50 cartridges