

MYCOTOXINS IN FEED

SC 2016 UPDATE

New York State
Department of Agriculture and Markets
Food Laboratory Division





European Commission Method

AOAC mycotoxin community

Finalized a multi-mycotoxin method using solvent extraction – LC/MS/MS analysis

In 2015 completed a collaborative study with 31 labs reporting results

European Commission Method

- 5 grams sample + 25 ml solvent
- Extraction solvent
 - 79% acetonitrile
 - 1% formic acid
 - 20% water
- Shake for 30 minutes
- Evaporate dry
- Reconstitute w/ internal standards in mobile phase



European Commission Method

**AOAC mycotoxin community meeting in Los Angeles
September 2015 there was interest in forwarding the
method to AOAC for approval**

Analytes



AAFCO method needs

- Aflatoxin B₁
- Aflatoxin B₂
- Aflatoxin G₁
- Aflatoxin G₂
- Ochratoxin A
- Fumonisin B₁
- Fumonisin B₂
- Fumonisin B₃
- Zearalenone
- Deoxynivalenol
- T-2
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EU method

Aflatoxin B₁

Ochratoxin A

Fumonisin B₁

Fumonisin B₂

Zearalenone

Deoxynivalenol

T-2

HT-2

In December 2015 we sent 4 previously analyzed AAFCO mycotoxin samples to 9 labs

7 state labs

1 Federal lab

2 private labs

We asked for each sample to be analyzed in duplicate and to describe the method used

Check sample material



201461	Poultry Feed
201462	Swine Feed
201463	Cattle Feed
201464	Dog Food