

## *rapid kinetic assay*

**rapid kinetic assay** was developed by **aokin** and is an innovative method for trace analysis. The assay is based on determining the reaction kinetics of an analyte with a specific antibody. The reaction is carried out in solution and polarized fluorescence is used as an indicator.

**rapid kinetic assays** have been optimized by **aokin** to determine mycotoxins in wheat and animal feed.

Advantages of the **aokin** method:

**rapid**

The entire test, including sample preparation, can be completed in less than 15 minutes.

**quantitative**

Detection limit of less than 0,1 ppb

**reliable**

Variance < 10 %

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*Mycotoxin analysis –  
rapid, quantitative  
and reliable*



## APPLICATION

Zearalenone (ZON) and Deoxynivalenol (DON) are both mycotoxins, which due to fungal infestations of the wheat ear during growth, can be found in flour and subsequently get into the food chain.

Infestations with these field fungi can vary widely. Regular control of mycotoxin levels is required to ensure consistent high quality grain products.

**aokin** provides a complete system for carrying out rapid and quantitative grain analysis:  
**aokin mycontrol ZON**, **aokin mycontrol DON**  
**aokin spectrometer**  
**aokin mycontrol-Software**

### Test procedure

1. Sample preparation:  
Easy and rapid extraction and preparation according to a standardized protocol
2. Measurement:  
Start measurement in the **aokin spectrometer** and add reagents
3. Evaluation:  
Automatic determination of concentrations using the **aokin mycontrol-Software**

**Total time required: 15 minutes**

**rapid kinetic assays** provide the same accuracy as conventional HPLC procedures, but allow an easier and faster operation and are therefore more efficient.

Characteristics of **aokin mycontrol ZON**

Determination range 1 - 100 ppb  
 Variance < 10 %  
 Correlation coefficient (r) 0,997

Characteristics of **aokin mycontrol DON**

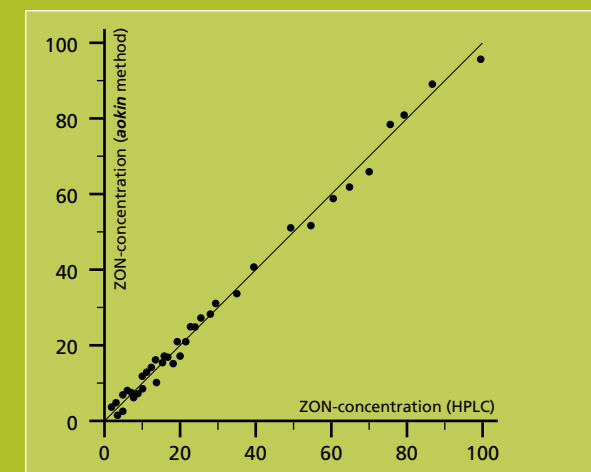
Determination range 10 - 2000 ppb  
 Variance < 10 %  
 Correlation coefficient (r) 0,996



**aokin spectrometer FP470**  
and analysis kit **aokin mycontrol ZON**



**aokin mycontrol-Software**



Zearalenone concentration in wheat (in ppb) – comparison of the **aokin** method and HPLC