



# Strategy and results of the Danish Plant Directorate's analysis of pesticides residues in feed yesterday today and tomorrow

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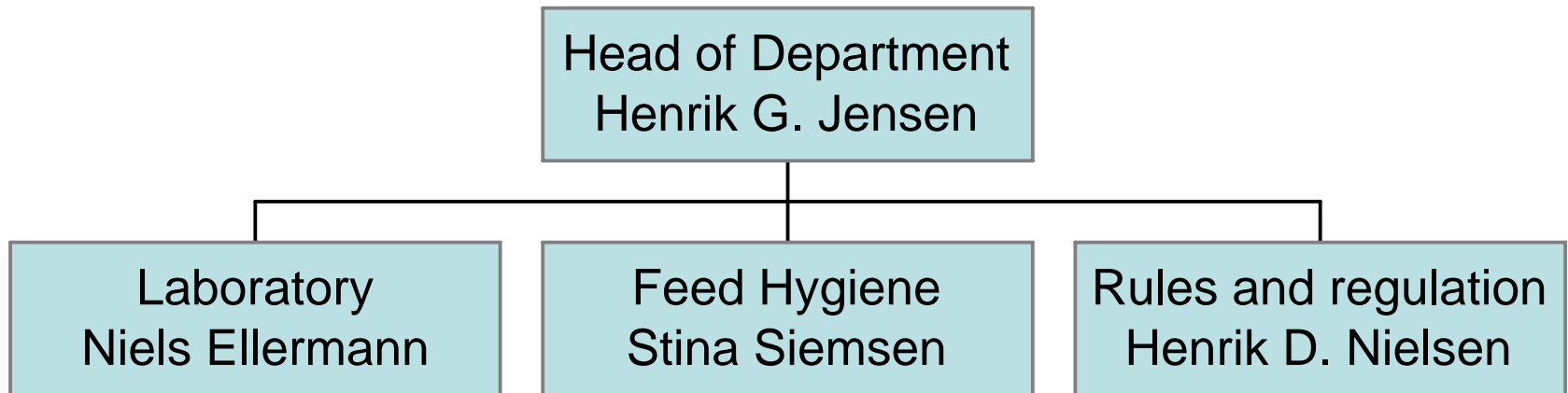
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# Department of Feed and Fertilizers







# Overview

- International methods
- Methods used for pesticides residues in feed
- Monitoring programs
- Results from the Danish control
- The future
- Questions and comments





# International methods

- EN/ISO 14182 Animal feeding stuffs Determination of residue of organophosphorus pesticides
- EN/ISO 14181 Animal feeding stuffs Determination of residue of organochloride pesticides
- prEN 15741 Animal feeding stuffs Determination of OC-pesticides and PCB's by GC/MS
- prEN 15742 Animal feeding stuffs Determination of OC-pesticides and PCB's by GC/ECD
- CEN/TC 327 "Animal feeding stuffs" new item:  
Multimethods for determination of pesticides residue in animal feed





# Methods for pesticides residues at DPD

- Pr EN 15741 and pr EN 15742 Determination of OC-pesticides
- Determination of glyphosate in animal feeding stuffs (inhouse accredited)
- Determination of chlormequat and mepiquat in animal feeding stuffs (inhouse accredited)
- Determination of PCP in guar gum, QuEChERS-method
- Determination of pesticides in cereals (inhouse accredited)





# Most used pesticides in cereals in Denmark

Prosulfocarb

loxynil

Tebuconazole

Pendimethalin

Bentazon

Epoxiconazole

MCPA

Dimethoat

Bromoxynil

Fenpropimorph

Fluroxypyr

Fenpropidin

Azoxystrobin

Propiconazole

Prochloraz





# Monitoring programs

- 1987 Maximum contents for OC pesticides
- 2000 Maximum contents for pesticides in food
- 2002 RASFF nitrofen in wheat
- 2003 Scan rapport on undesirable substances
- Monitoring programs for food







## Results from the Danish control

- Before 1999 only OC pesticides
- 1999 Glyphosate, chlormequat and mepiquat in Danish cereals
- 2000 Chlormequat and mepiquat in Danish cereals
- 2003 Pesticides in Danish cereals
- 2007 Pesticides in Danish cereals





# Type of pesticides found 2007

Azoxystrobin  
Pendimethalin  
Tebuconazole  
Fluroxypyr  
Fenpropidin  
MCPA  
Epoxiconazole





## The future

- 2008 Glyphosate, chlormequat, mepiquat and pesticides in Danish cereals
- 2009 Pesticides in soy product for animal feed
- 2009 Pesticides in imported cereals
- Pesticides in byproducts used for animal feed
- Pesticides in "new" animal feed





# Time for questions and comments

