



Outcome of the FEFAC data collection on T-2/HT-2 in feed materials and compound feed

Arnaud Bouxin
Deputy Secretary General

FEFAC - European Feed Manufacturers Federation

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FEFAC in a nutshell

- Created in 1959
- Industrial compound feed and premixtures manufacturers
- 26 Members:
 - 21 Member Associations from 20 EU Member States
 - 2 Observer members (Turkey, Croatia)
 - 3 Associate Members (FHL, EMFEMA, Switzerland)
- Represents 60% of the EU compound feed production
- 6 Technical committees to assist the FEFAC Council
 - Animal Nutrition
 - Industrial Compound Feed Production
 - Premix & Mineral Feed
 - European Feed Manufacturers Guide (EFMC)
 - Fish Feed
 - Milk Replacers

FEFAC database on T-2/HT-2

- Source: FEFAC Member Associations and companies from 8 countries
 - Collective monitoring plan: UK, FR, IT, DE, BE
 - Company auto-controls: NL, SK, ES
 - No data from SE or FI (feed manufacturer participate in official monitoring – data not included in FEFAC database)
- Analytical method:
 - Mostly ELISA (FR, ES, SK) for T2
 - Some HPLC MS/MS (BE, IT, NL) for T2
 - Some GCMS (UK) for T2 and all samples for HT2
- Type of feed:
 - Cereals: all
 - Cereals by-products: mostly wheat feed and oat feed (EU origin)
 - Other feed materials: oilseed meals
 - Compound feed: pig, poultry, some horse
- Period 2004-2008

Breakdown of data by countries

	T-2				HT-2			
	Cereals	Cereals by-products	Other feed materials	Compound feed	Cereals	Cereals by-products	Other feed materials	Compound feed
NL	4	0	0	0	0	0	0	0
Belgium	13	0	0	0	13	0	0	0
France	263	6	0	159	26	5	0	0
Spain	42	3	7	45	0	0	0	0
UK	76	58	0	0	76	58	0	0
Germany	9	0	0	0	9	0	0	0
Slovakia	79	2	11	59	1	0	0	0
Italy	91	8	4	25	0	0	0	0
Total	577	77	22	288	125	63	0	0

Breakdown of data by year

	T-2				HT-2			
	Cereals	Cereals by-products	Other feed materials	Compound feed	Cereals	Cereals by-products	Other feed materials	Compound feed
2004	187	1	0	52	15	5	0	0
2005	82	5	0	56	13	0	0	0
2006	98	28	3	70	40	24	0	0
2007	118	26	11	34	30	20	0	0
2008	92	17	9	76	27	14	0	0
Total	577	77	22	288	125	63	0	0

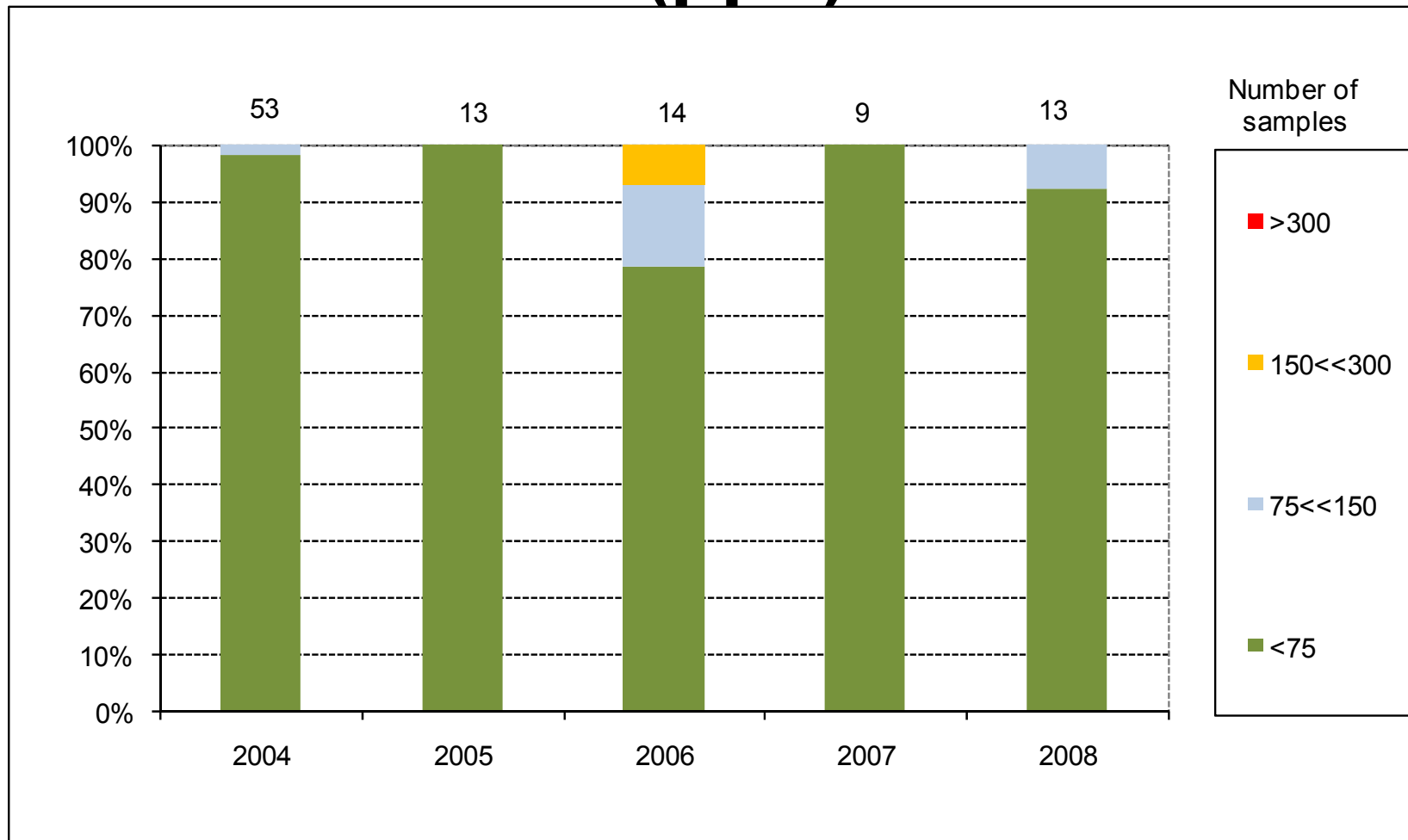
For cereals and cereals by-products, harvest year
 For other feed, calendar year

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T-2 in barley for feed use

Number of samples by class of contamination (ppb)

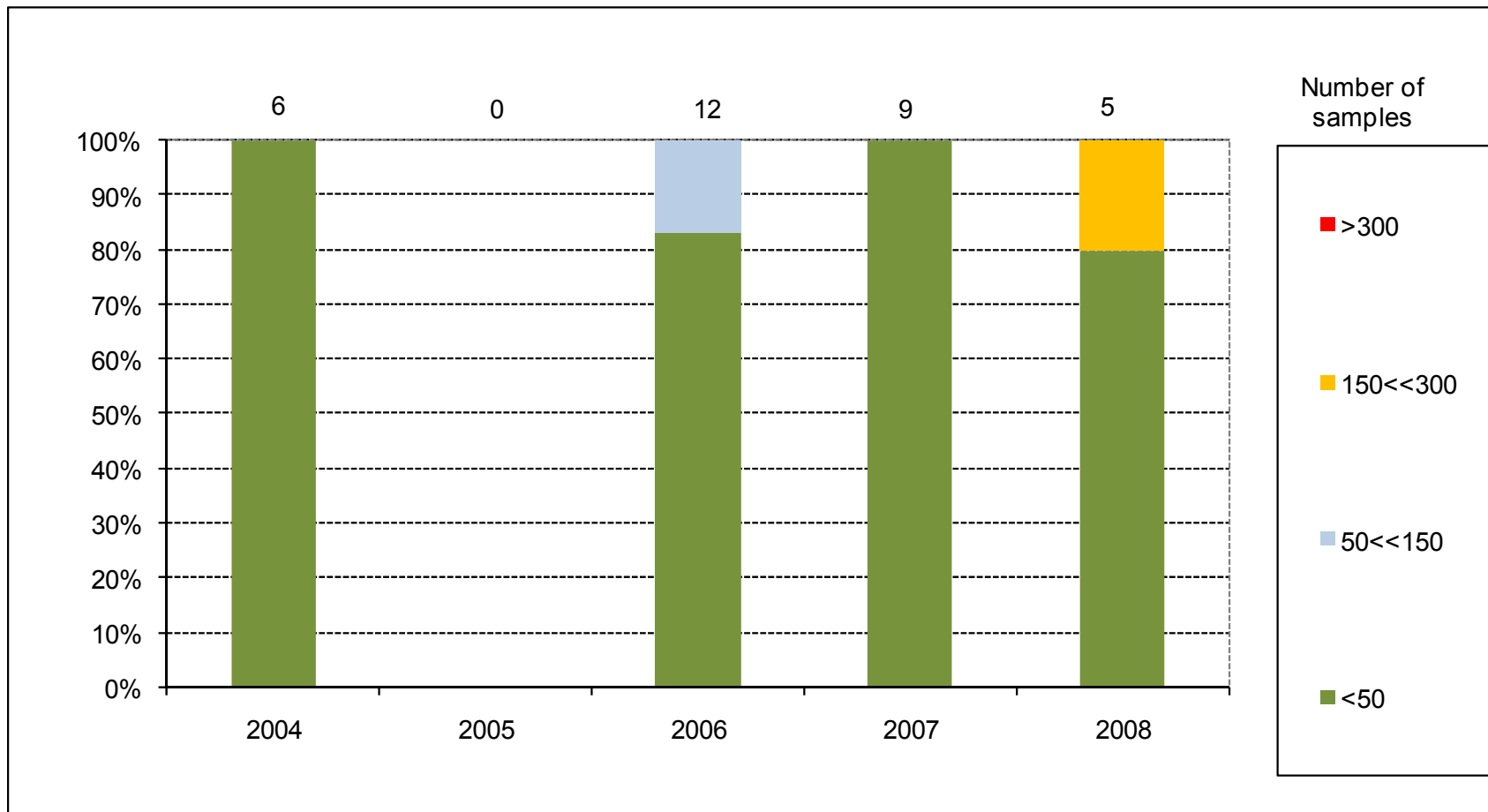


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HT-2 in barley for feed use

Number of samples by class of contamination (ppb)



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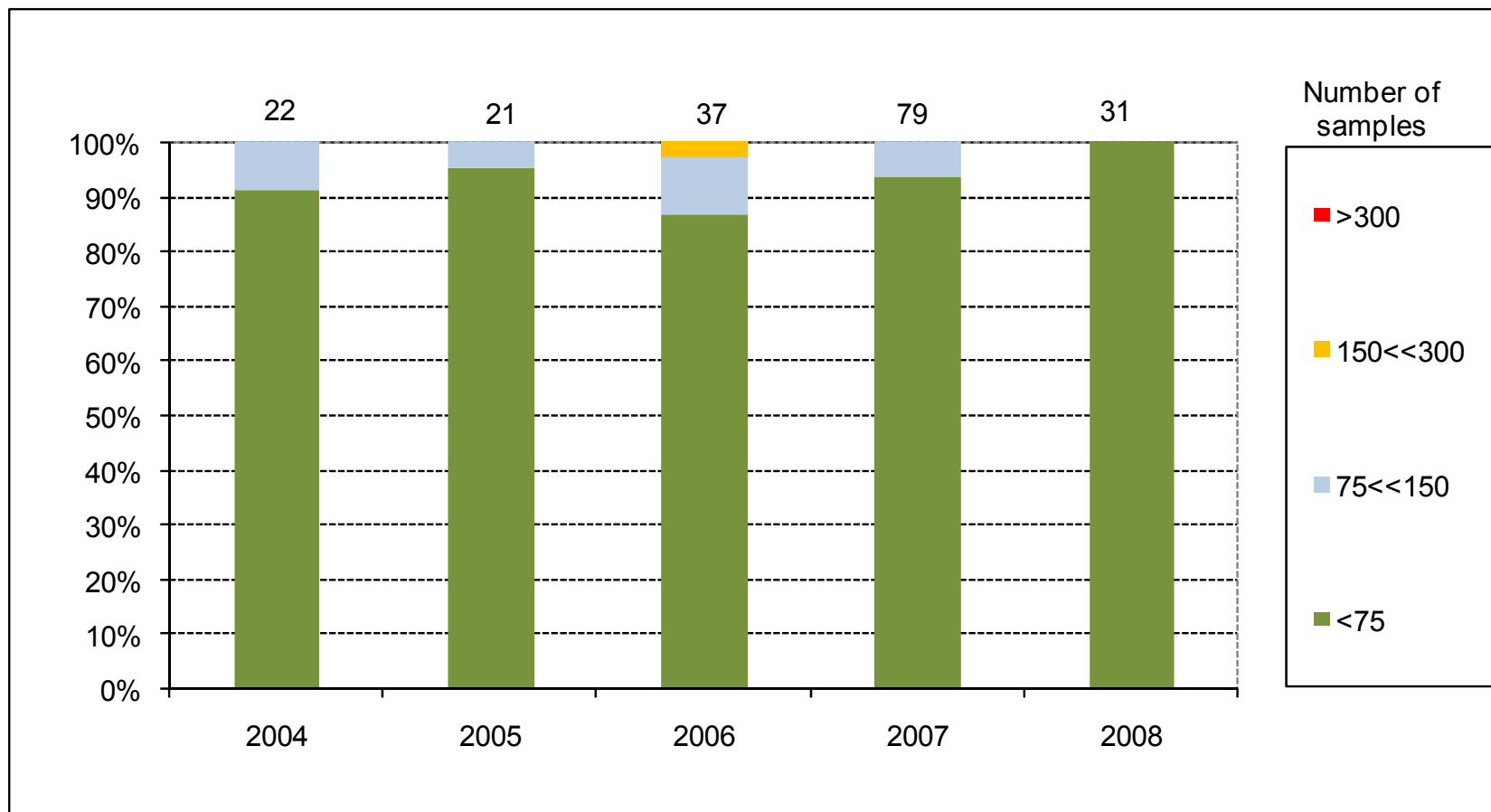
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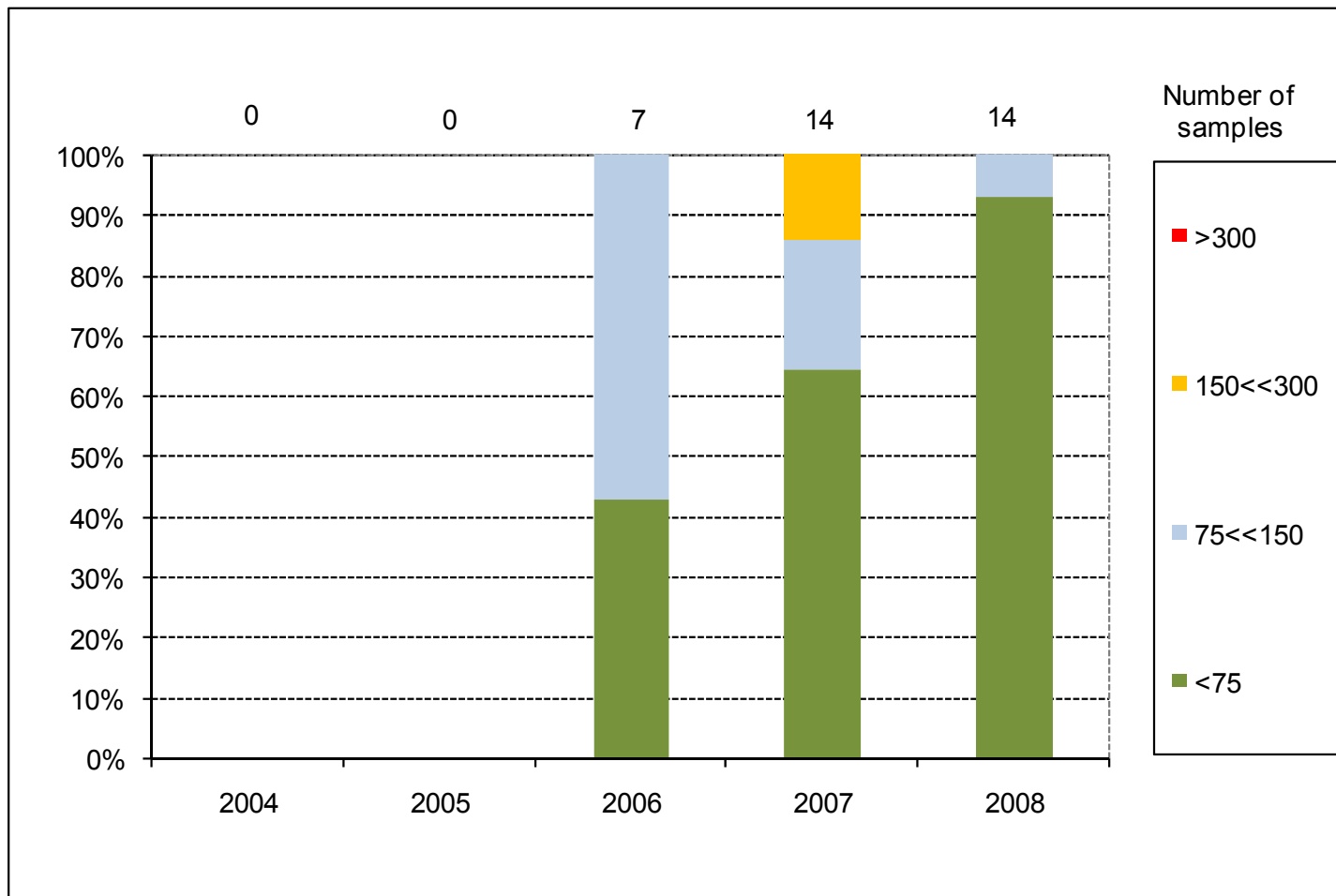
T-2 in maize for feed use

Number of samples by class of contamination (ppb)



T-2 in oat for feed use

Number of samples by class of contamination (ppb)

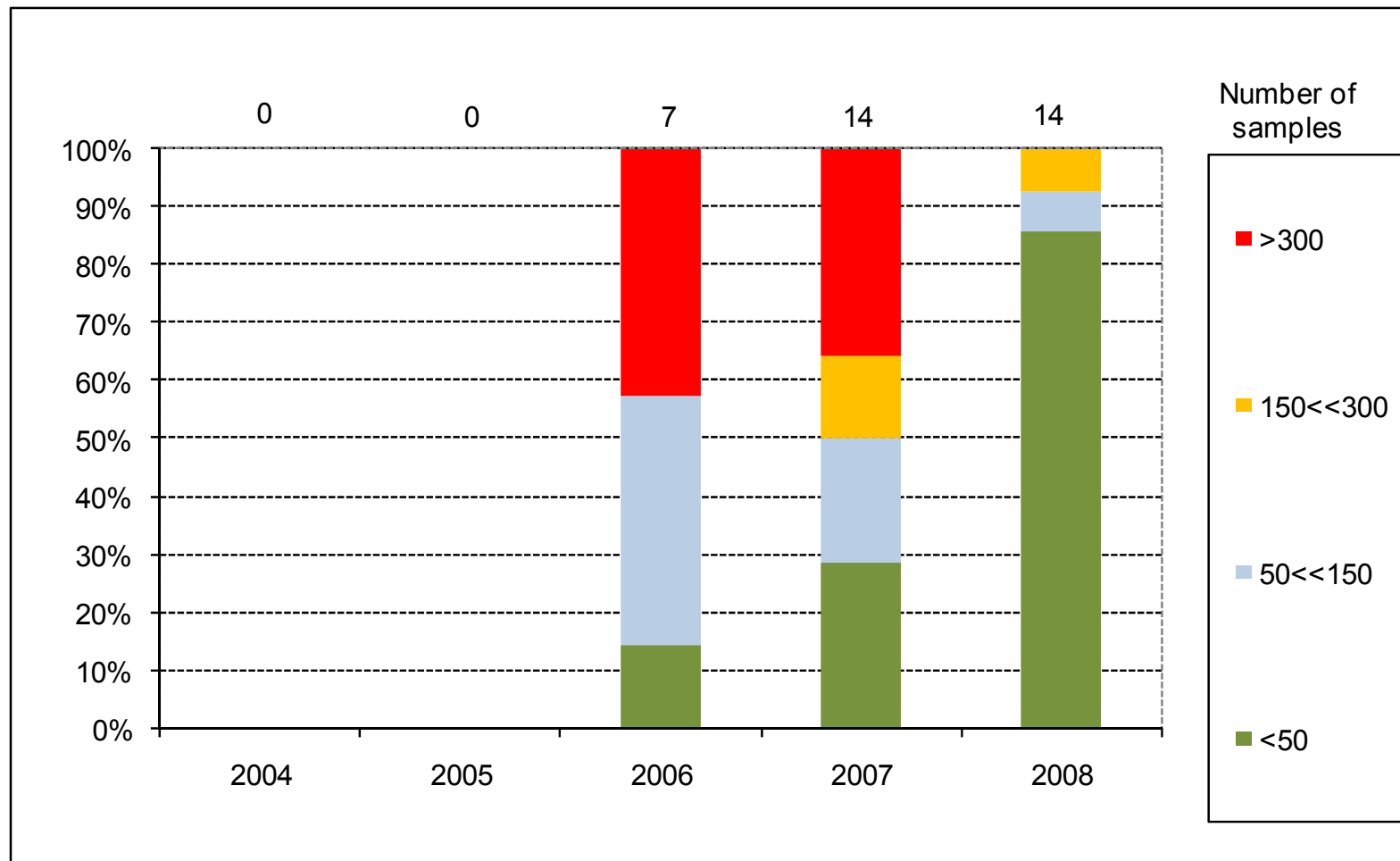


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HT-2 in oat for feed use

Number of samples by class of contamination (ppb)



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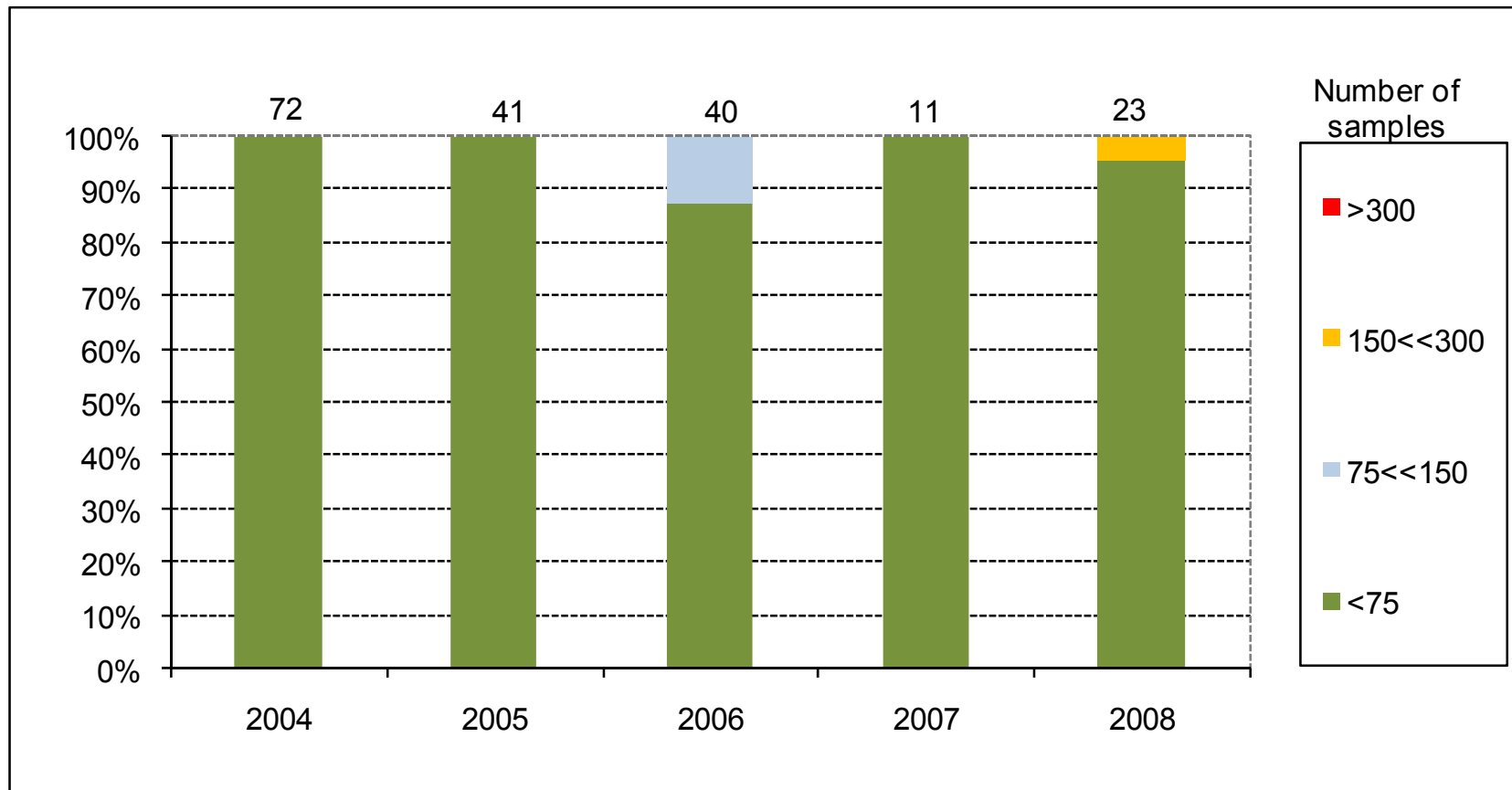
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T-2 in wheat for feed use

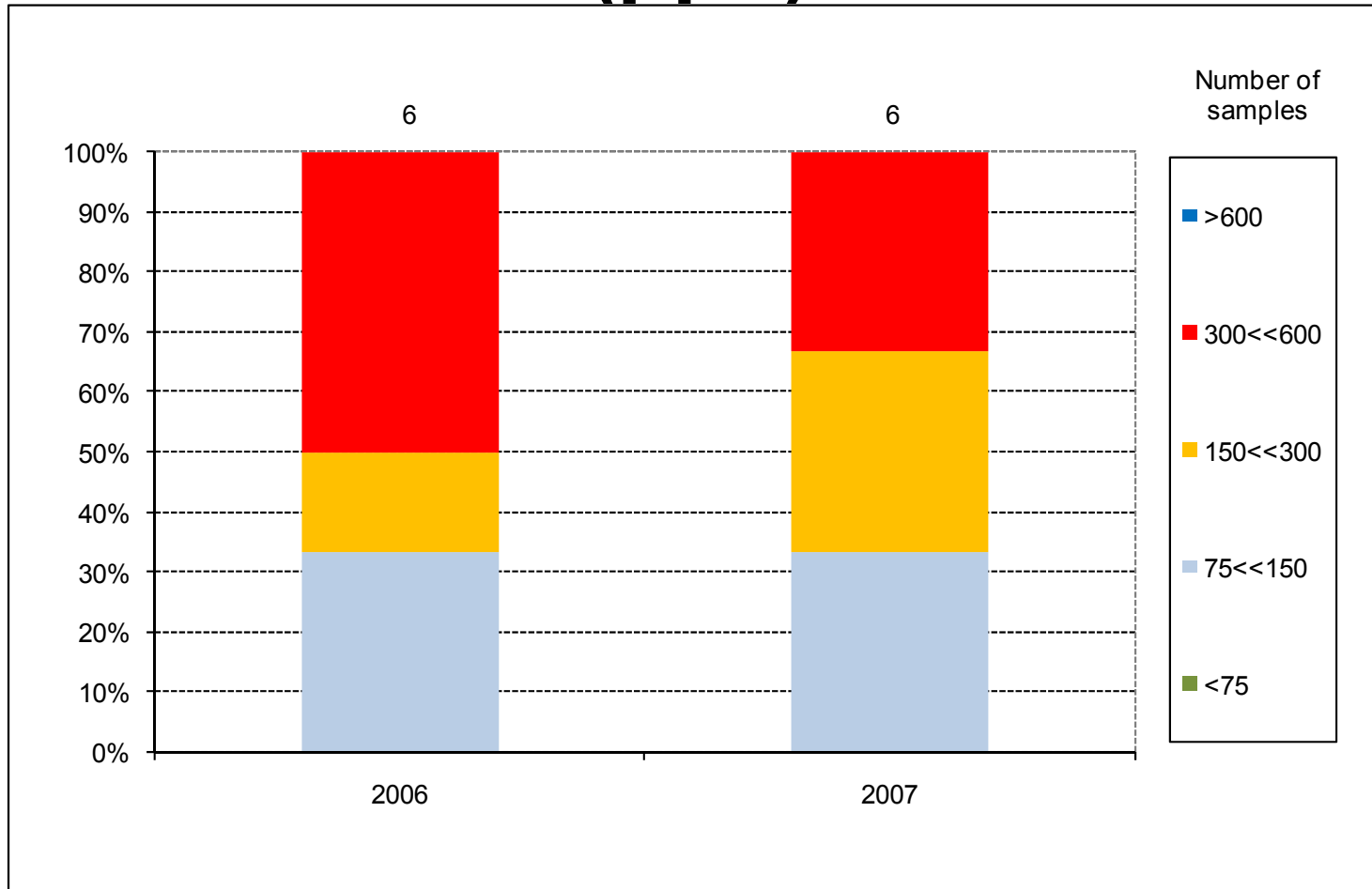
Number of samples by class of contamination (ppb)



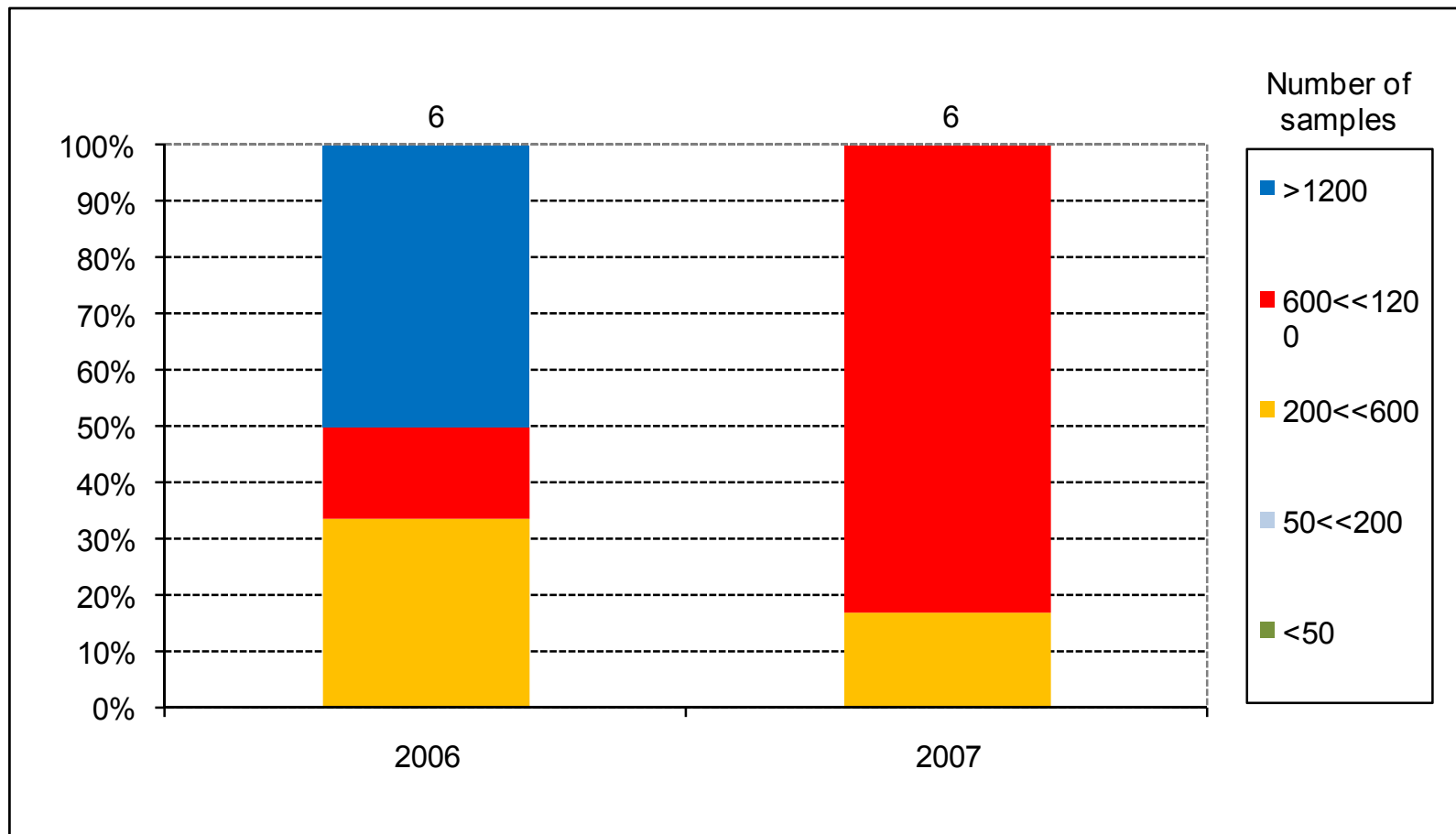
Conclusion for grains

- Very low incidence of T-2 in triticale and wheat
- Low T-2 incidence in barley and maize (always below 300 ppb)
- Higher incidence of T2 in oat
- Low incidence of HT-2 in wheat, maize and barley
- Relatively important incidence of HT-2 in oat

T-2 in oat by-products (oatfeed) Number of samples by class of contamination (ppb)

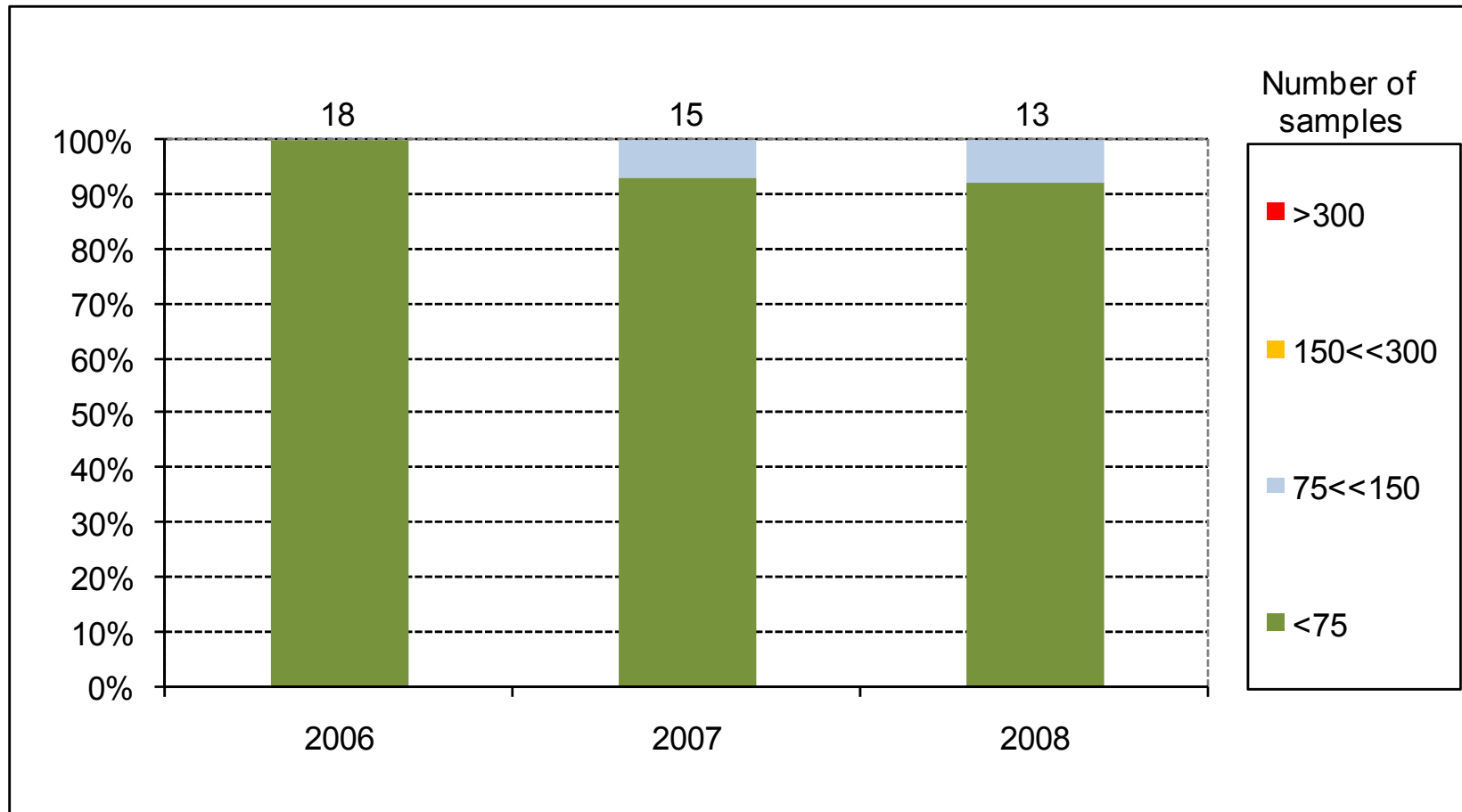


HT-2 in oat by-products (oatfeed) Number of samples by class of contamination (ppb)

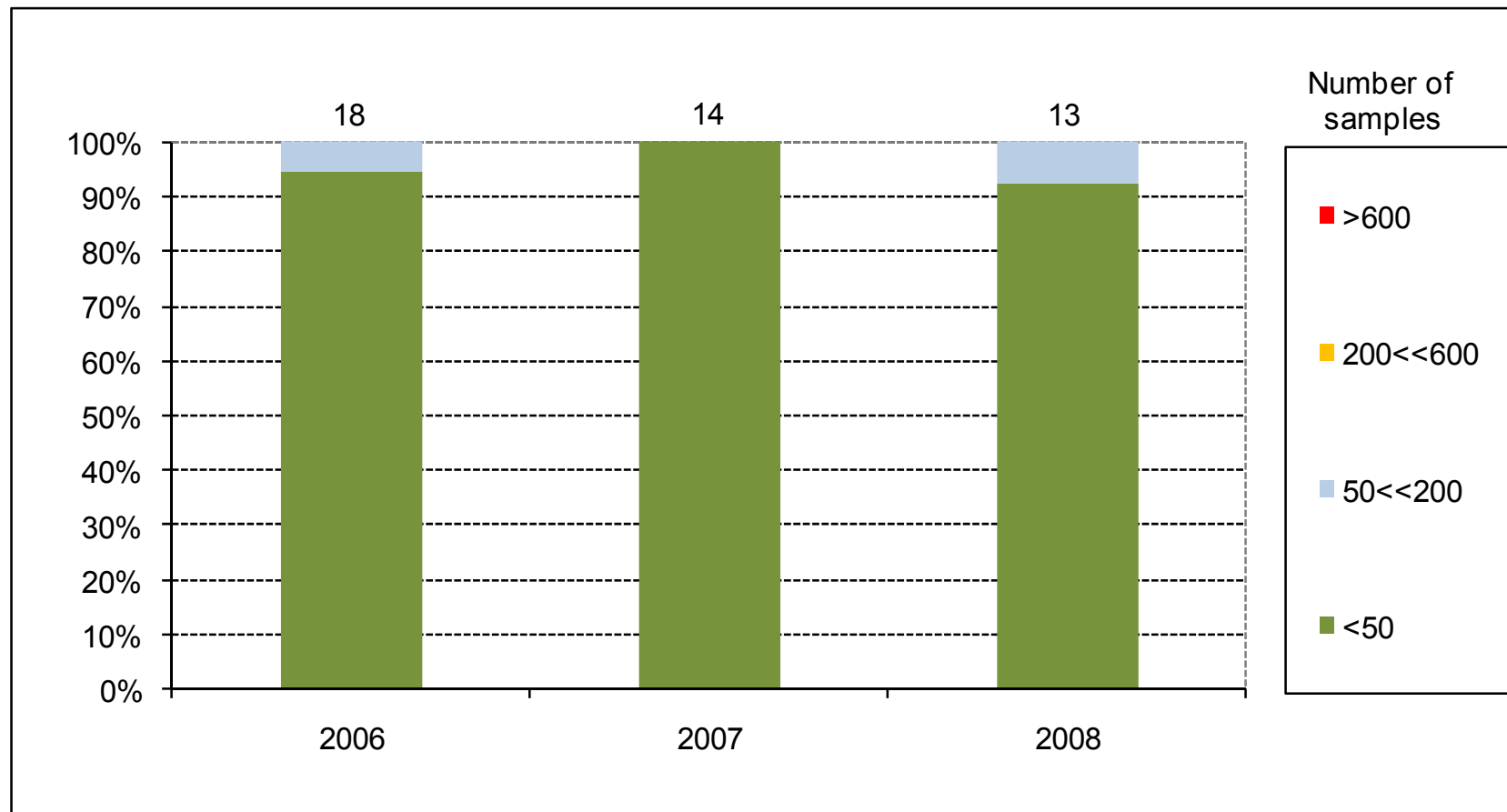


T-2 in wheat by-products (wheat feed)

Number of samples by class of contamination (ppb)



HT-2 in wheat by-products (wheat feed) Number of samples by class of contamination (ppb)

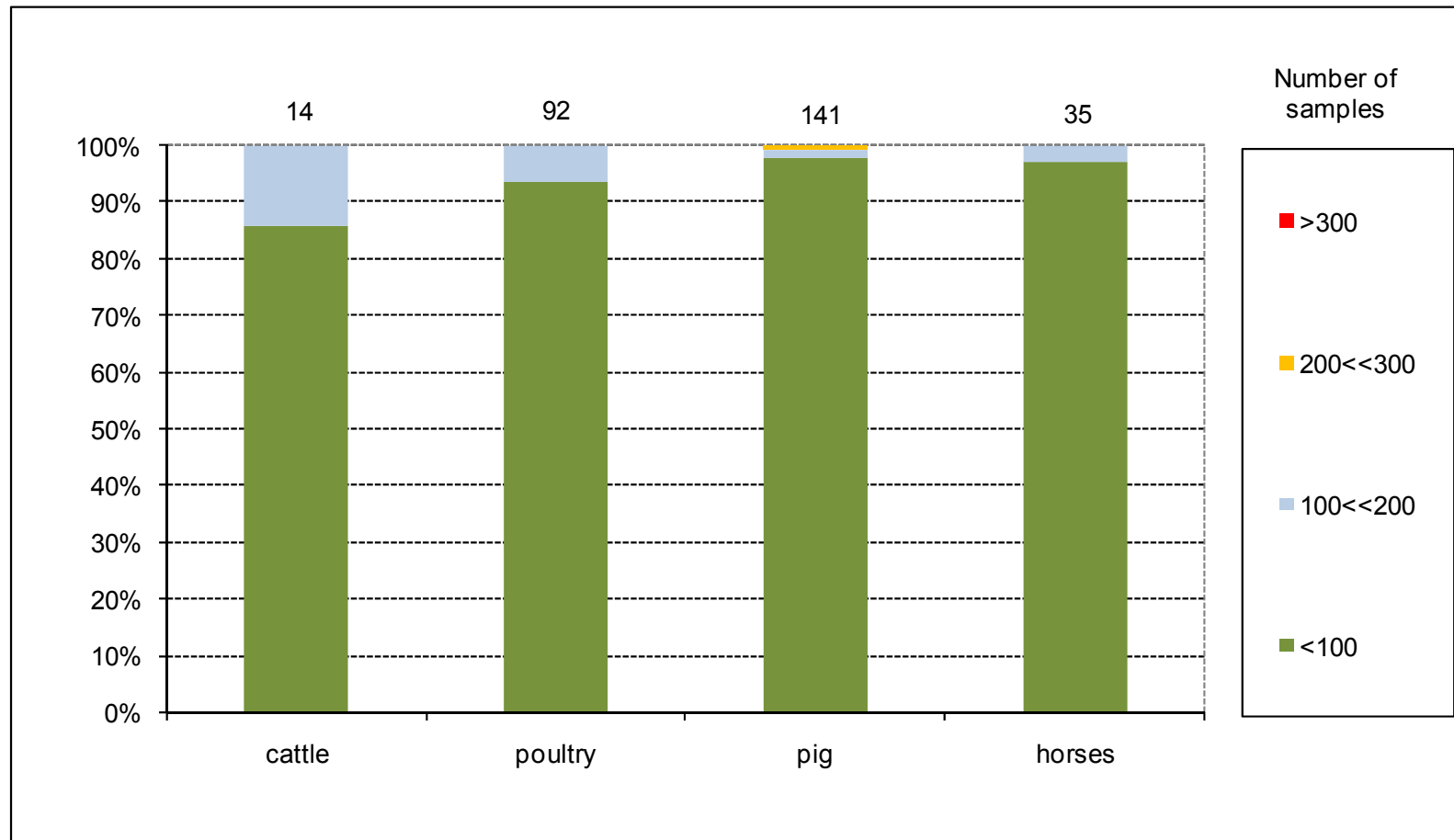


Conclusions for by-products and other feed materials

- Based on limited number of samples
- Low incidence of T-2 / HT-2 in wheatfeed
- Rather high incidence of T-2/HT-2 in oatfeed
- Low incidence of T-2/HT-2 in oilseed meals (<50 ppb)

T-2 in compound feed

Number of samples by class of contamination (ppb)



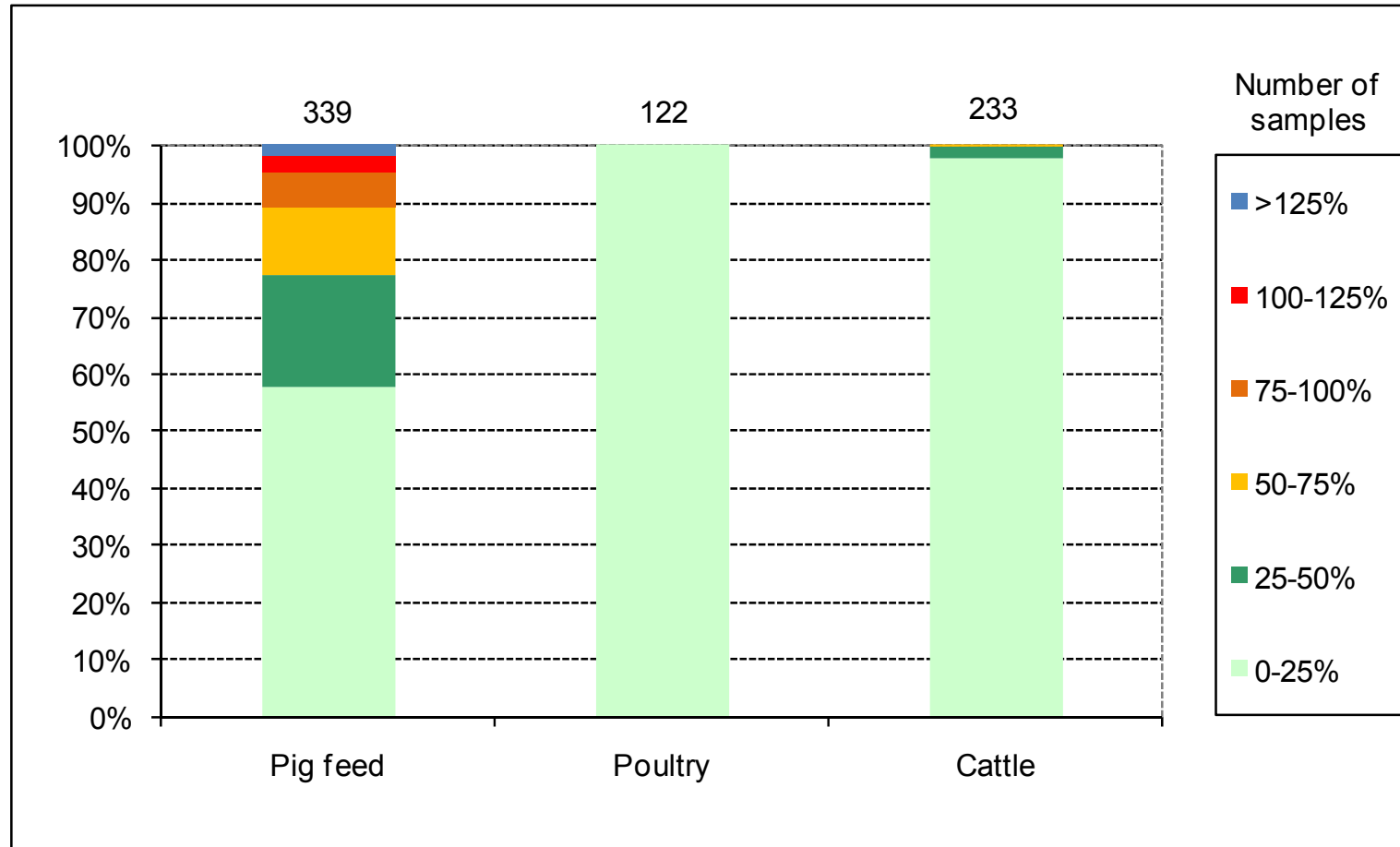
Conclusions T-2 compound feed

- Most compound feed for all species below 100 ppb
- A few samples between 100 and 200 ppb

General conclusions

- Monitoring shows:
 - Low prevalence of T-2/HT-2 in feed materials except oat and oat by-products
 - Presence of T-2 / HT-2 likely to be higher in compound feed with fiber rich feed materials, i.e. horses and cattle
 - T-2 in compound feed in general below 100 ppb and always below 200 ppb for all species
 - Results for compound feed for horses from one country only. Would need to be cross-checked with other countries
- Wait for EFSA opinion – risk for human health?
- Need for official methods before considering setting any EU standard
- If guidance values should be set, should be limited to at-risk feed materials and sensitive species where necessary

DON in compound feed: Percentages of samples by class of percentage of the guidance value (ppm)



ZEA in compound feed: Percentages of samples by class of percentage of the guidance value (ppm)

