
POULTRY HEALTH SITUATION IN AUSTRIA

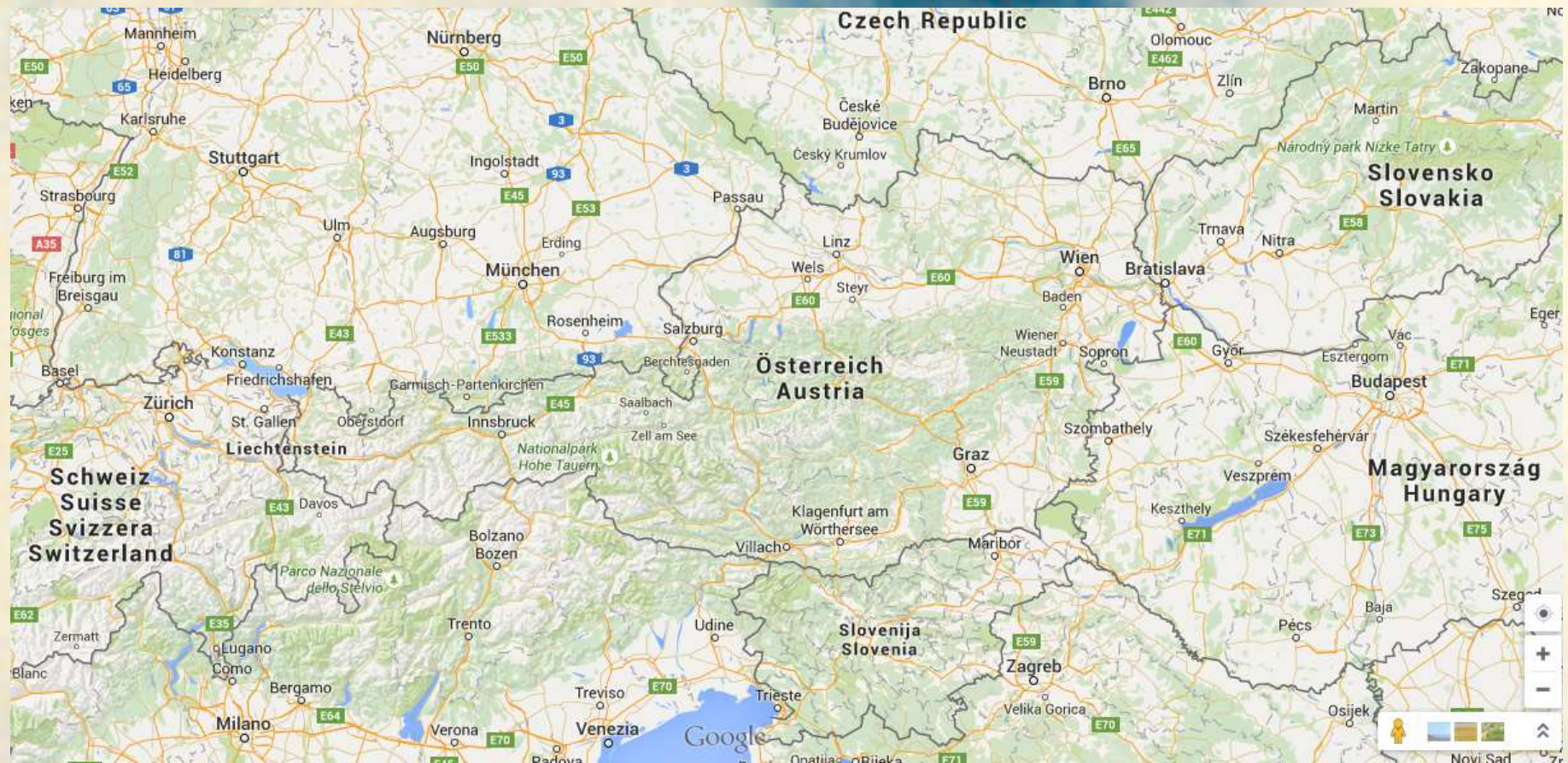
DR. PETER MITSCH

POULTRY SPECIALIST

WVPA autumn meeting,
Budapest 24.9.2015



AUSTRIA...



...KNOWN FOR



FACTS

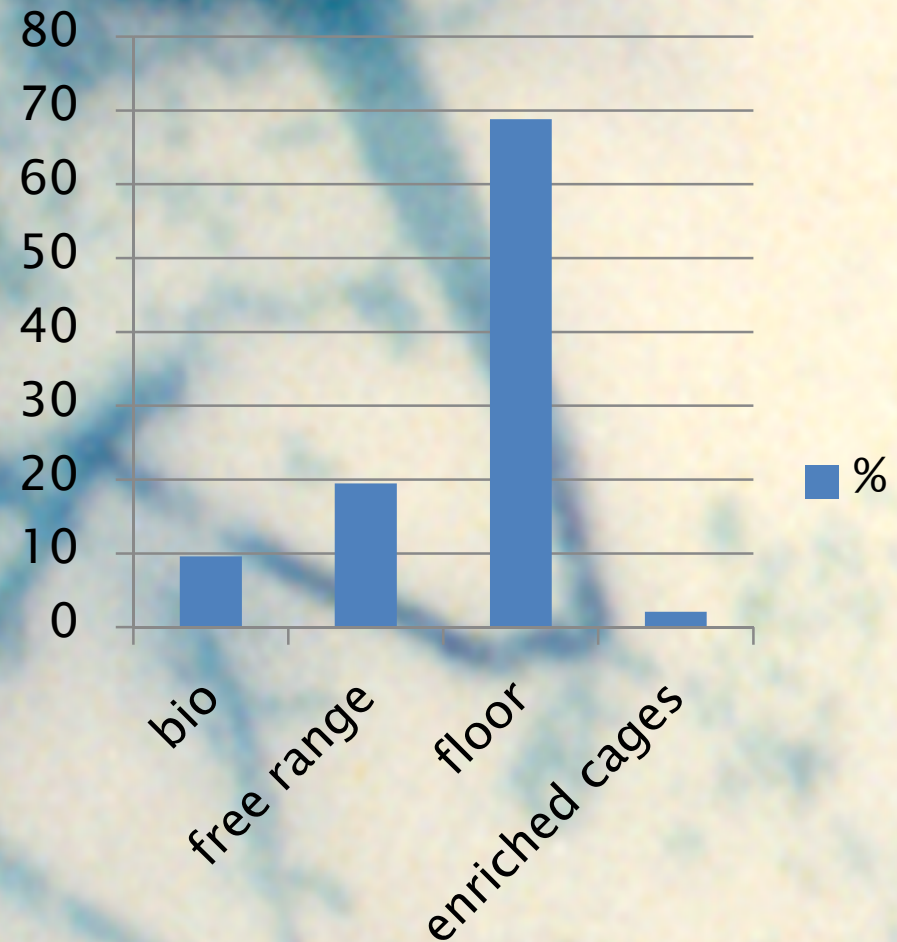
- × Inhabitants: 8.6 Mio
- × Größe: 83.879 km²
- × Capital: Vienna
- × 9 different regions (Bundesländer)
- × Government: coalition socialist (SPÖ)–
people´s party (ÖVP)



POULTRY IN AUSTRIA

Layers:

- × > 6.1 Mio layers
 - + > 1800 farms
 - + > 1.7 Mrd eggs
 - + 107.000 tons
 - + 81 % self supply
- × Egg consumption:
 - + 235 eggs / 14.4 kg
- × 2.85 Mio rearing places
- × 3 hatcheries



POULTRY IN AUSTRIA

Broiler:

- × 75 mio broiler / year slaughtered
 - + 478 farms
 - + 5 hatcheries
 - + 9 slaughterhouses
 - + 100.000 tons meat
 - + 83 % self supply
- × Meat consumption
 - + 14 kg / year, increasing



POULTRY IN AUSTRIA

Turkey:

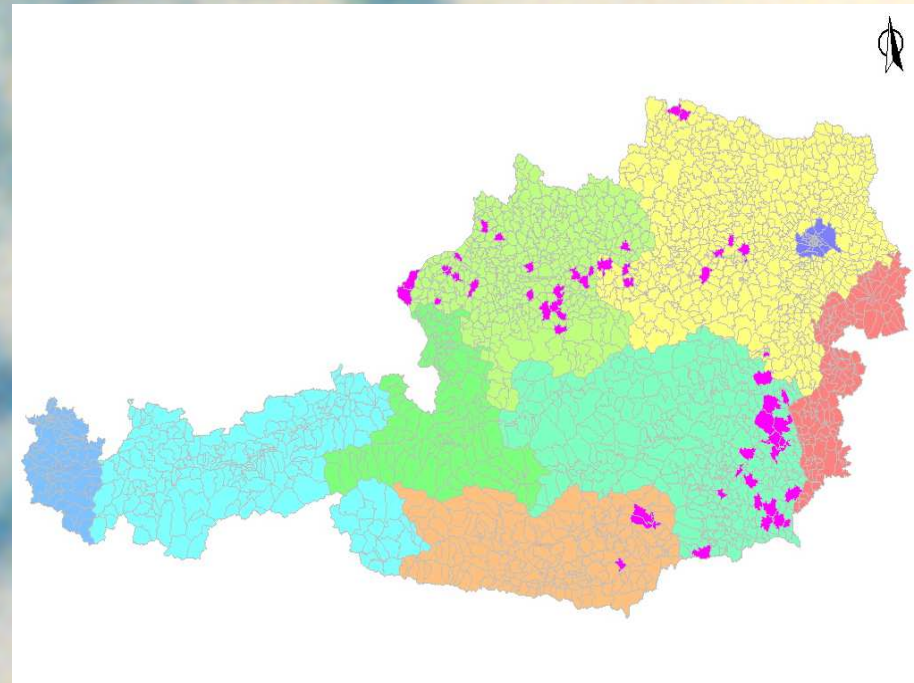
- × 1.8 mio turkeys / year
 - + 146 farms
 - + 2 hatcheries
 - + 2 slaughterhouses
 - + 22.480 tons meat
 - + 45 % self supply
- × Meat consumption
 - + 5,9 kg



POULTRY IN AUSTRIA

Breeders:

- ✖ Around 1 mio breeder places
 - + 750.000 broiler breeders
 - + 250.000 layer breeders
 - + 68 production farms
 - + 29 rearing farms



GENERAL PROBLEMS IN AUSTRIA

- ✗ Stocking density:
 - + Broilers: 30 kg / m²
 - + Turkeys: 40 kg / m²
- ✗ Animal welfare discussion
 - + Especially about turkeys
 - ✗ Filming in stables, demonstrations, newspapers, TV,...
 - + Use of antibiotics
 - + Killing of day old chicks
- ✗ Public opinion negative to poultry industry



ANTIBIOTICA DISCUSSION

Poultry health database (PHD)

- × All flocks are registered
- × All samples and salmonella tests are documented
- × Vaccination regime
- × All treatments are documented
- × State vets and officials have authorized access

PHD2.3 - Herdenliste zu Betrieb - [redacted] Schließen (Betriebsstammdaten)

Broiler

- Herdenliste (aktive / 2012 / 2011 / 2010 / älter)

Kennzeichen	Einstalld.	Schlachtdatum	Tierzah	Resttieranzahl	Stall	gepl. Schlachtbetrieb	Ges.besch.	SFU	Herdenbestandsblatt
M233-11M006 48	02.12.2011	11.01.2012	15.000	0	Halle	Wech Geflügel GmbH	203090,203792		
M233-11M005	40 07.10.2011	15.11.2011	15.000	218	Halle	Wech Geflügel GmbH	197632,198470		
M233-11M004	32 08.08.2011	08.09.2011	14.500	0	Halle	Wech Geflügel GmbH	170554,171180		
M233-11M003	23 06.06.2011	14.07.2011	14.800	0	Halle	Wech Geflügel GmbH	146644,146430		
M233-11M002	14 08.04.2011	18.05.2011	15.500	0	Halle	Wech Geflügel GmbH	129062,130720		
M233-11M001	06 07.02.2011	24.03.2011	14.900	0	Halle	Wech Geflügel GmbH	110712		

Neue Herde anlegen

Alle aufklappen

Alle einklappen

Flock-samples and results

Proben / Herde

Probendatum	LW	Proben§	Probenart	Probenmat.	Untersuch.auf	Erg.EL	Erg.NL	ProbenID
19.12.2011	3	§ 37 - Stiefeltupfer	ATA: 2 paarige Stiefeltupfer - 10% Stichprobe	Stiefeltupfer (2 Stück)	Salmonellen	neg		E-201285
19.12.2011	3	§ 37 - 60 Sammelkotproben/150g	ATA: 60 Sammelkotproben Mastherden - 10% Stichprobe	Kot (60 Stück)	B1: Hemmstoffe	neg		E-201286

Neuen Untersuchungsauftrag anlegen

Vaccination data

Impfungen

Datum	Krankheit	Impfstoff	Impfcharge	Dosierung	Applikationsform	Wartezeit bis (e.Gw. / Ei)	Abgabe	Abg.menge	Tierzah
02.12.2011	Gumboro - Infektiöse Bursitis	Nobilis Gumboro D 78 Pulver für Hühner	A043BN02	1000/1000 peroral		16.12.2011 (0+(-/-) Tage)	[redacted]	0,00	D 15.000

Neue Impfung anlegen

Treatment data

Behandlungen

Datum	Krankheit / Diagnose	Arzneimittel	Dosierung	Applikationsform	Wartezeit	Abgabe	Abg.menge	Tierzah
02.12.2011	Bakterielle Infektion	Pulmodox 500mg/g (Hühner)	0,5 g / l Trinkwasser	peroral	12.12.2011 (5 +(5/-) Tage)	[redacted]	0,00 kg	15.000

Neue Behandlung anlegen

- Neue Behandlung anlegen Herde: M233-11M006 48 ausblenden

Datum: 03.02.2012

Gegen Krankheit: [dropdown]

Arzneimittel: [dropdown]

Behandlungsdauer in Tagen: [input]

Tierzah: [input] 0

☐ Tieranzahl lt. Herdenbestandsblatt bestätigt.

Dosierung: [input]

Abgabemenge: [input] [dropdown]

Applikationsform: [dropdown]

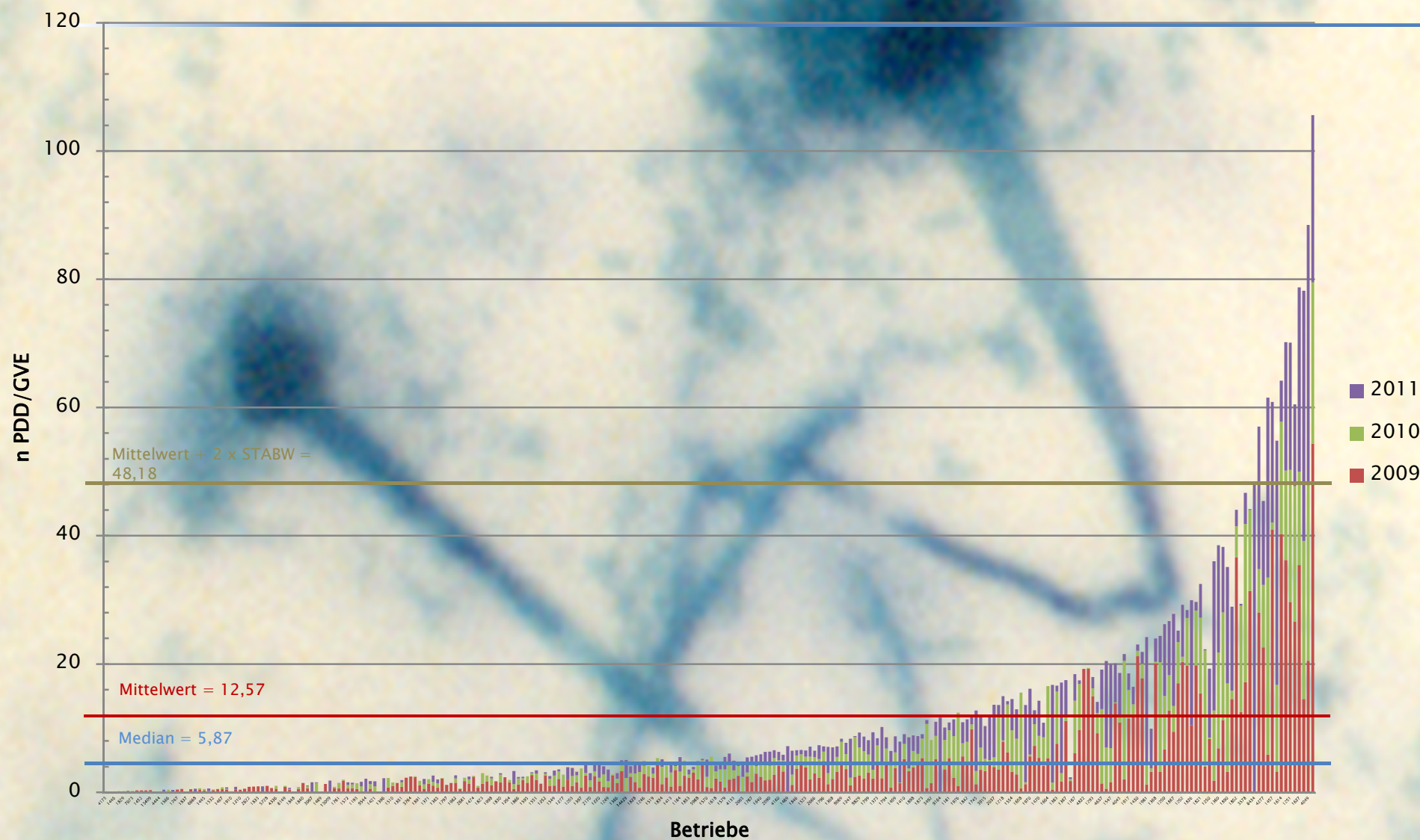
☐ Keine Anomalien bzw. Krankheitszeichen

(Bitte die Tieranzahl überprüfen und bestätigen. Weicht die Tieranzahl um mehr als 999 Tiere von der tatsächlichen Herdengröße zum Zeitpunkt der Behandlung bzw. der TAM-Ab entsprechend korrigiert werden.)

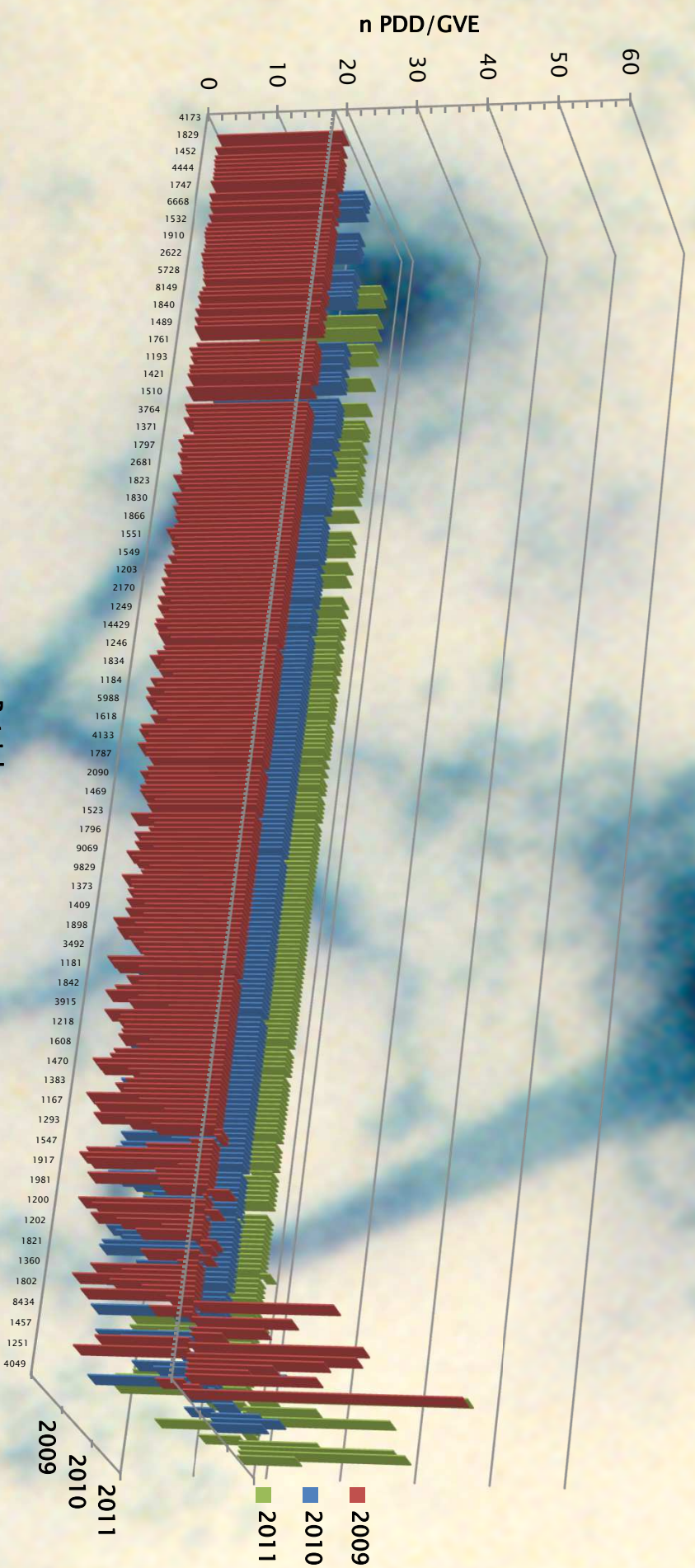
Documentation of each treatment

Anmerkung

used PDD / GVE and farm Broiler 2009 –2011



used PDD / GVE and farm Broiler 2009 – 2011

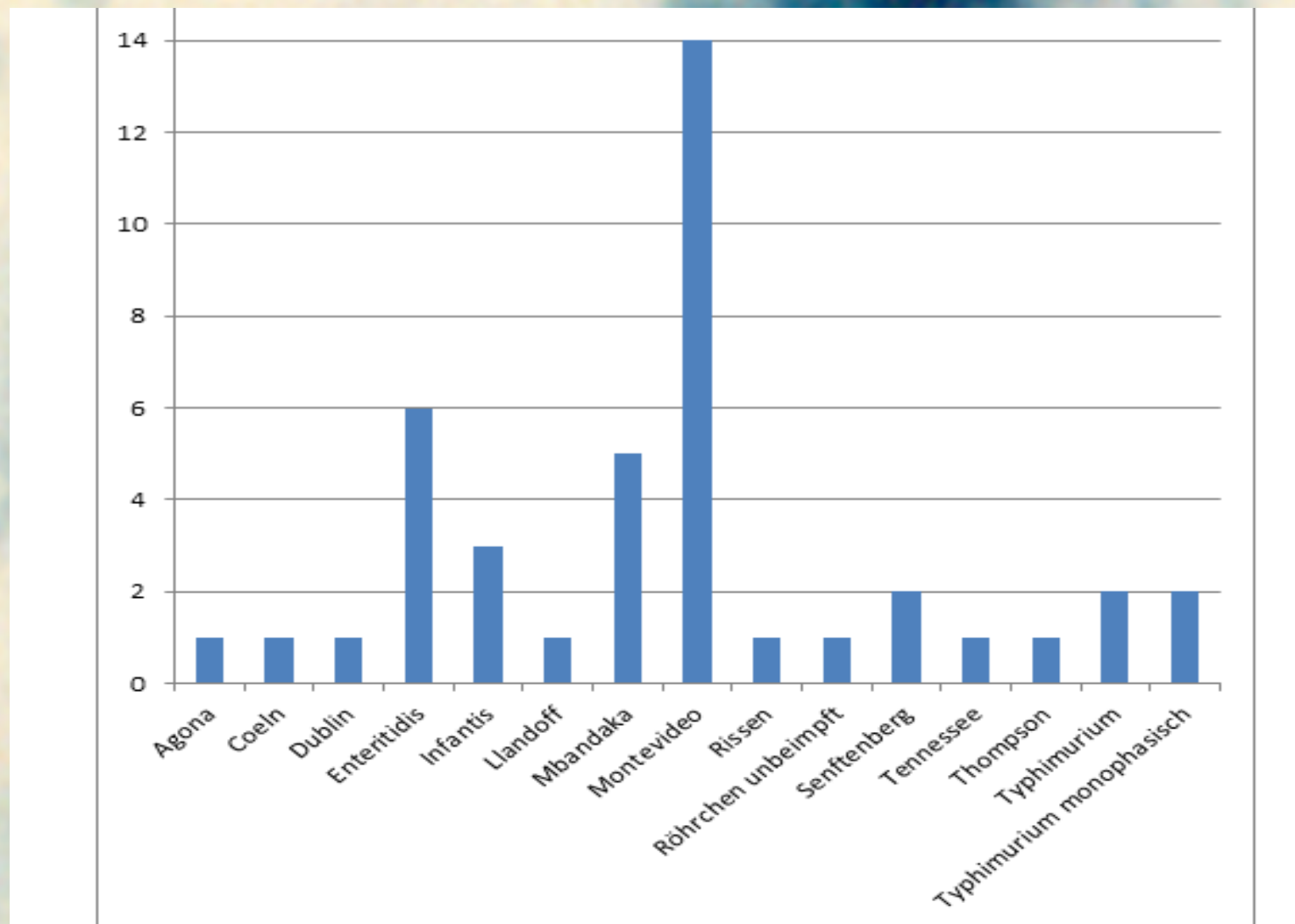


Betriebe sortiert nach Summe n PDD/GVE 2009 – 2011.

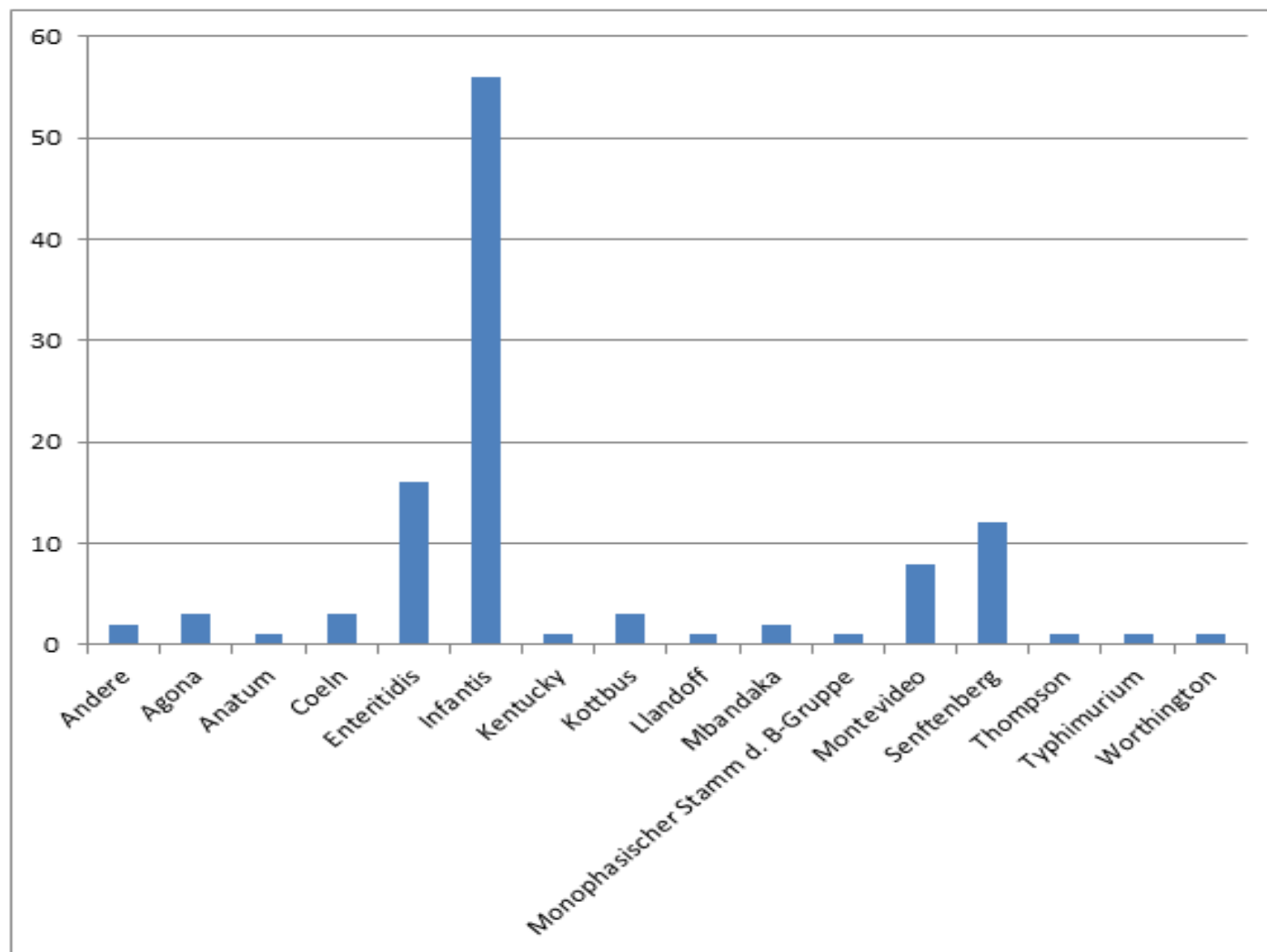
SALMONELLA STATISTIC 2014

	<u>Number of flocks</u>	<u>Nr birds</u>	<u>Pos flocks</u>	<u>pos birds</u>
<u>pullets</u>	424	6.742.465	1	4.500
<u>layers</u>	2.759	9.284.405	42	129.086
<u>broiler</u>	3.868	61.797.654	112	1.860.605
<u>turkeys</u>	365	2.037.260	12	151.820
<u>Layer breeders</u>	26	220.430	1	7.675
<u>Broiler breeders</u>	107	869.926	0	0

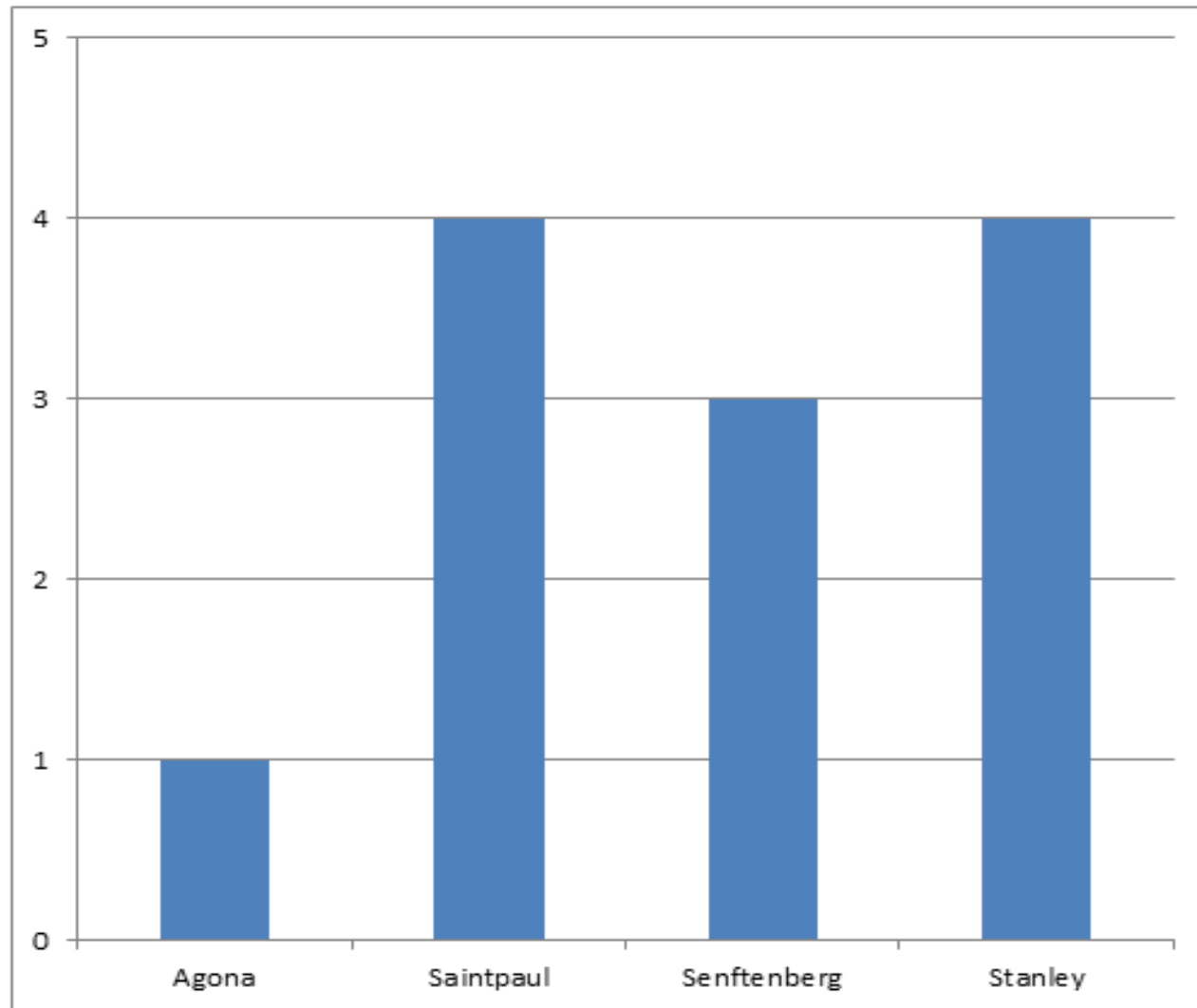
SALMONELLA LAYERS 2014 (42 POS)



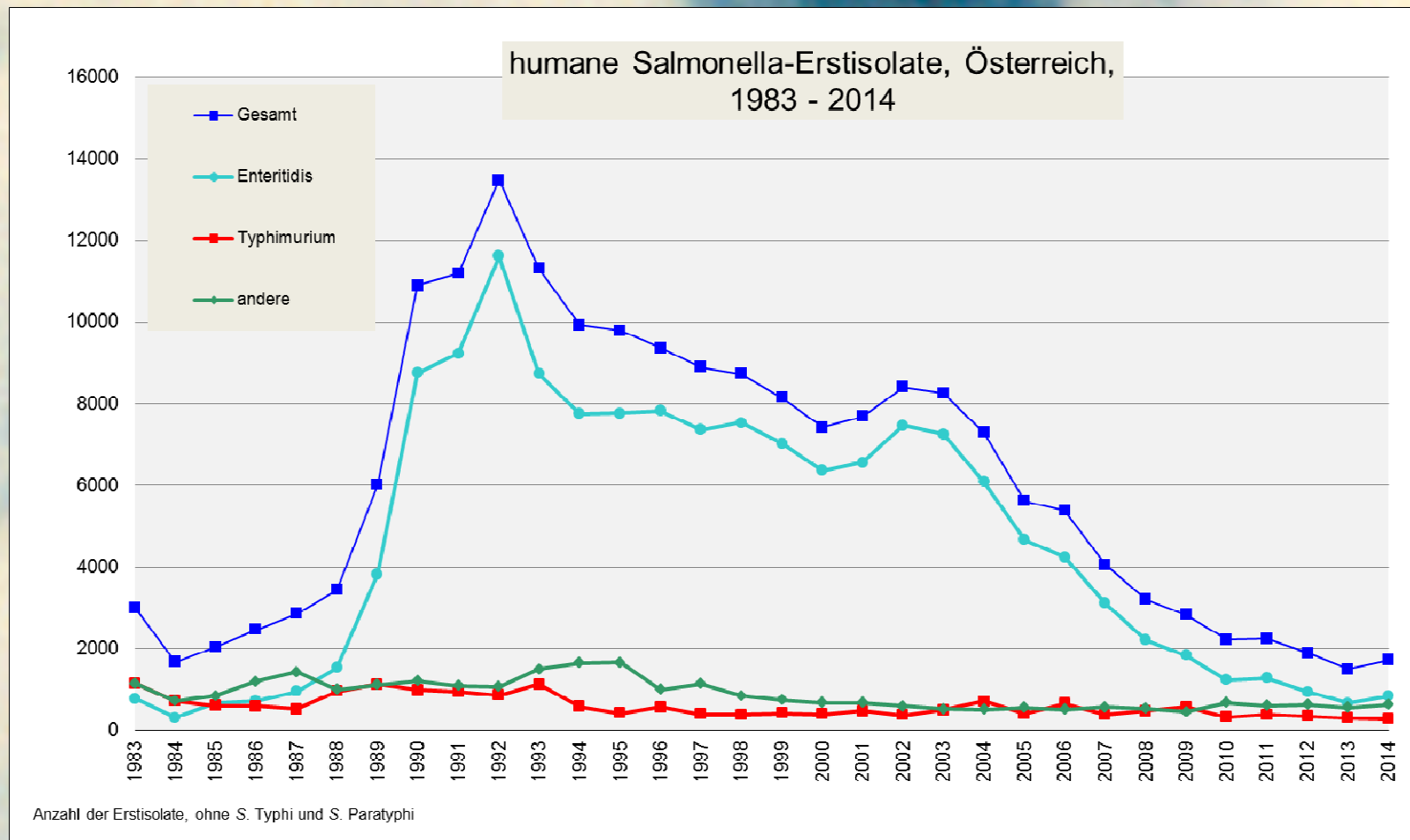
SALMONELLA BROILERS 2014 (112 POS)



SALMONELLA TURKEYS (12 POS)



HUMAN SALMONELLA CASES

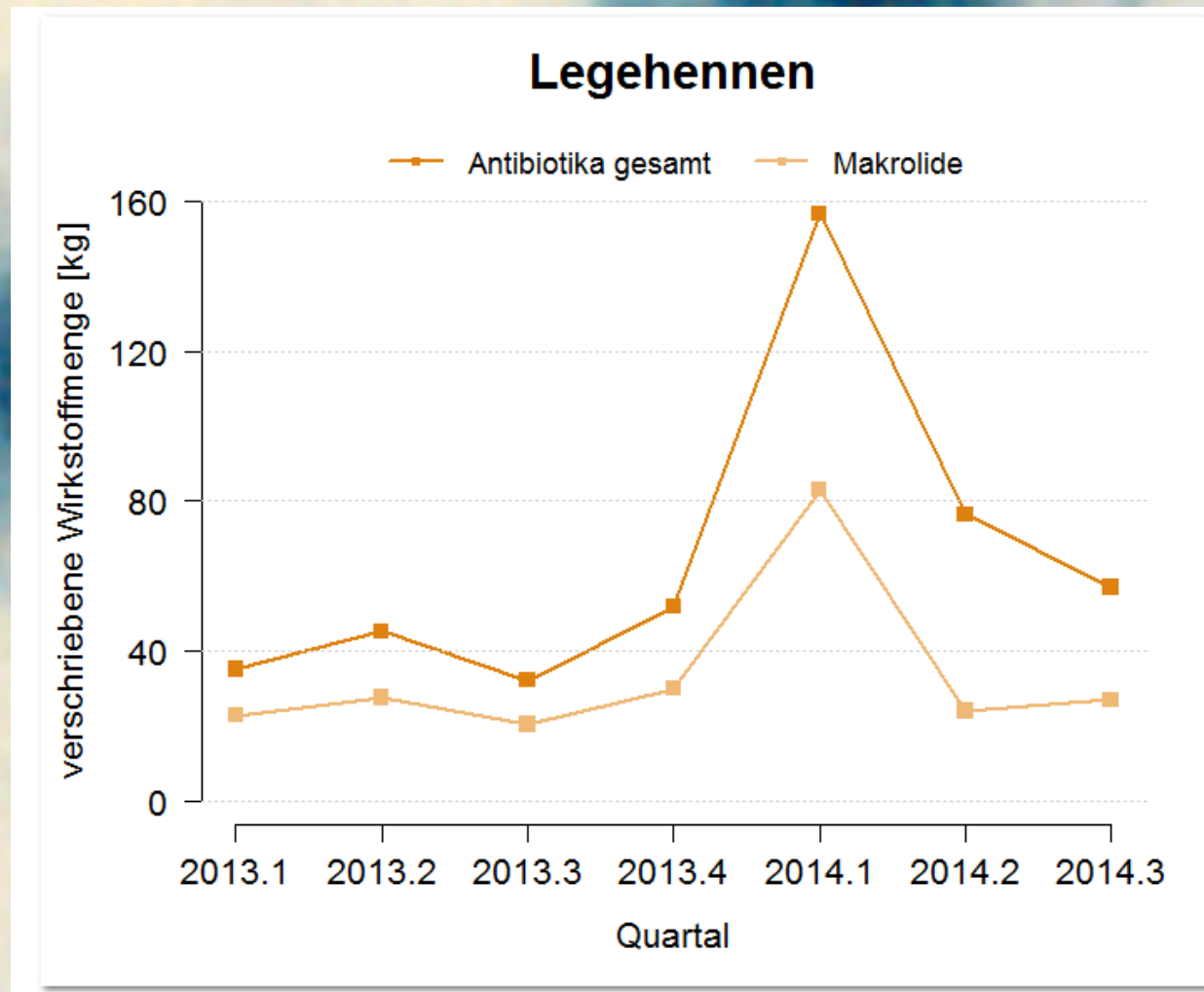


LAYERS

- × Problems since the start of „Donausoja“
 - + Intestinal problems, diarrhea
 - + Wet litter problems
 - + Clostridium perfringens infection ↑
 - + Fatty liver problems
 - + Egg shell quality ↓
 - + Performance decreasing
 - + More use of antibiotics



LAYERS



LAYERS

✖ Increasing intestinal problems

- + Worms
- + Histomonas
- + Brachyspira spp.



E. Coli infections

LAYERS

Diagnostic methods:

- × Worms:

 - + Post mortems, control of feces

- × Histomonas:

 - + Patho–Histology, PCR

- × Bacterial infections:

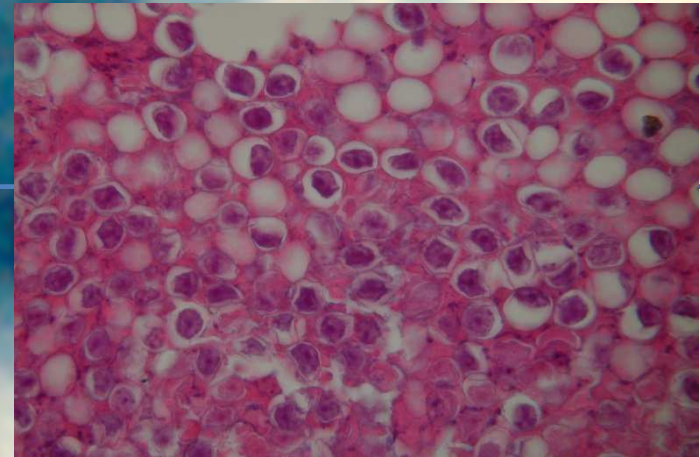
 - + Bacteriology, PCR (Brachyspira)

 - + Identification: MALDI–TOF MS (Prof. Hess)

TURKEYS

Histomonas meleagridis

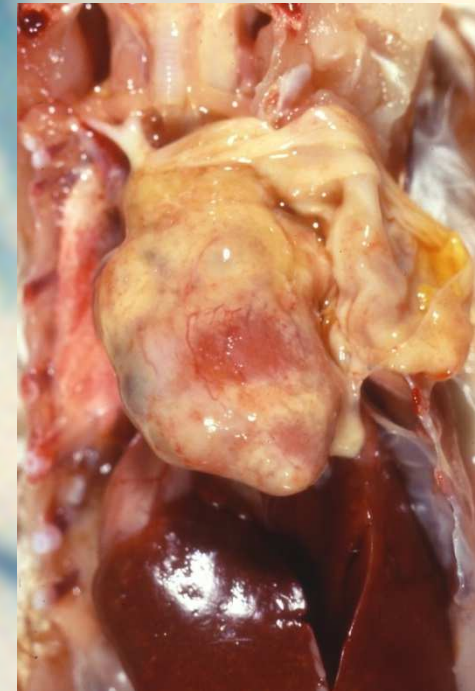
- ✖ Again more problems
 - + Every year we loose 1–4 flocks
 - + Up to 100% mortality
 - + Typical liver and ceaca lesions
 - + No treatment possible
 - + Herbs, acids,...
- ✖ Now trials with Paromycin



BROILER

High mortality + condemnation

- × 10% and more...
- × *E.coli* infections
 - + In first week
- × *E. coli* and Enterococcus
 - + from day 20 on
 - + Polyserositis
 - + Femur head necrosis
- × Treatments not very successful



BROILER

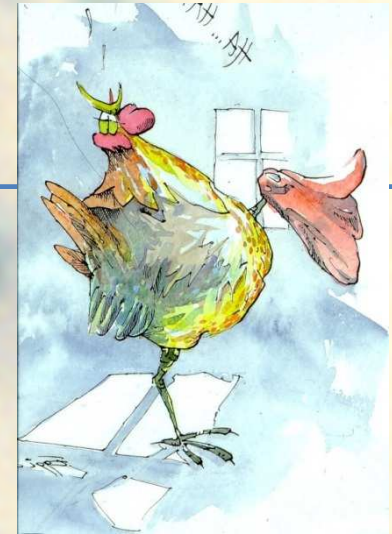
Antibiotikum	Kürzel	Teststamm	Teststamm	Teststamm	Teststamm
		<i>E. coli</i>	<i>Enterococcus</i>		
ENROFLOXACIN*	ENF 5	R	R		
DOXYCYCLIN*	DXT 30	R	R		
TRIMETH./SULF.*	TS 25	E	R		
Amoxicillin**	A 10	R	E		
Neomycin**	NE 30	E	R		
Colistinsulfat**	CO 10	e	R		
Penicillin**	PG 10	R	E		
Tylosin**	TY 30		E		
Tilmicosin**	TIL 15		R		
Tetracyclin***	T 30		R		
Oxytetracyclin***	OT 30	R	R		

Erläuterungen: E: empfindlich e: mäßig empfindlich R: resistent

BROILER

IB infections

- ✗ Less renal problems
- ✗ Increasing respiratory problems
- ✗ Vaccinations:
 - + Hatchery: IB Primer
 - + 14 days: IB 4/91 or IB QX
 - + → better results, less condemnations



BROILER

× Lot of testing

- + Very often no other pathogen found
- + No Ms, Mg, Reo, Adeno, IB,...
- + High levels of mycotoxins

Jahr	Deoxynivalenol (DON)		Zearalenon (ZEA)	
	Analysenzahl	Median µg/kg	Analysenzahl	Median µg/kg
2011	1198	200	1198	20
2012	1128	470	570	20
2013	1097	402	614	20
2014	1182	3.016	629	327

MYCOTOXINS



Biomin 

SPECIES PRODUCTS ABOUT

EUROPE:

Highest incidence of **T-2** toxin at **37%** and a high average concentration of **66 ppb**.



DON present in 73% of samples at an average concentration of **1864 ppb**.



Highest singly occurring **DON** level found in an Austrian corn sample at **29600 ppb**.



Over half of all samples contained **ZEN** at an average of **272 ppb**.



Highest singly occurring **ZEN** level found in an Austrian corn sample at **16495 ppb**.



MYCOTOXINS

- ✖ Litter material contaminated with mould



MYCOTOXINS

Contaminated litter

- × Higher mortality
 - + Bacterial infections (*E. coli*)
 - + Immunosuppression?
 - + Not only in first week, also from day 18 on...
 - + Difficult to treat
 - × Vitamins, Cu
- × Change of litter material → less problems

BROILERS

Diagnostic methods

- × Mycotoxins
 - + Elisa, LC/MS, HPLC
- × Virus (IB,...)
 - + PCR (tracheal swabs, organs)
- × Bacteria
 - + Bacteriology

BREEDERS

Histomonas problems

- × Very often together with bacterial infections (E. coli)
 - + Bacterial infections are recurring
 - + Hard to treat
 - + Performance not the best
- × Often only lesions in caeca



BREEDERS

- × Leg problems
- + Foot pad lesions

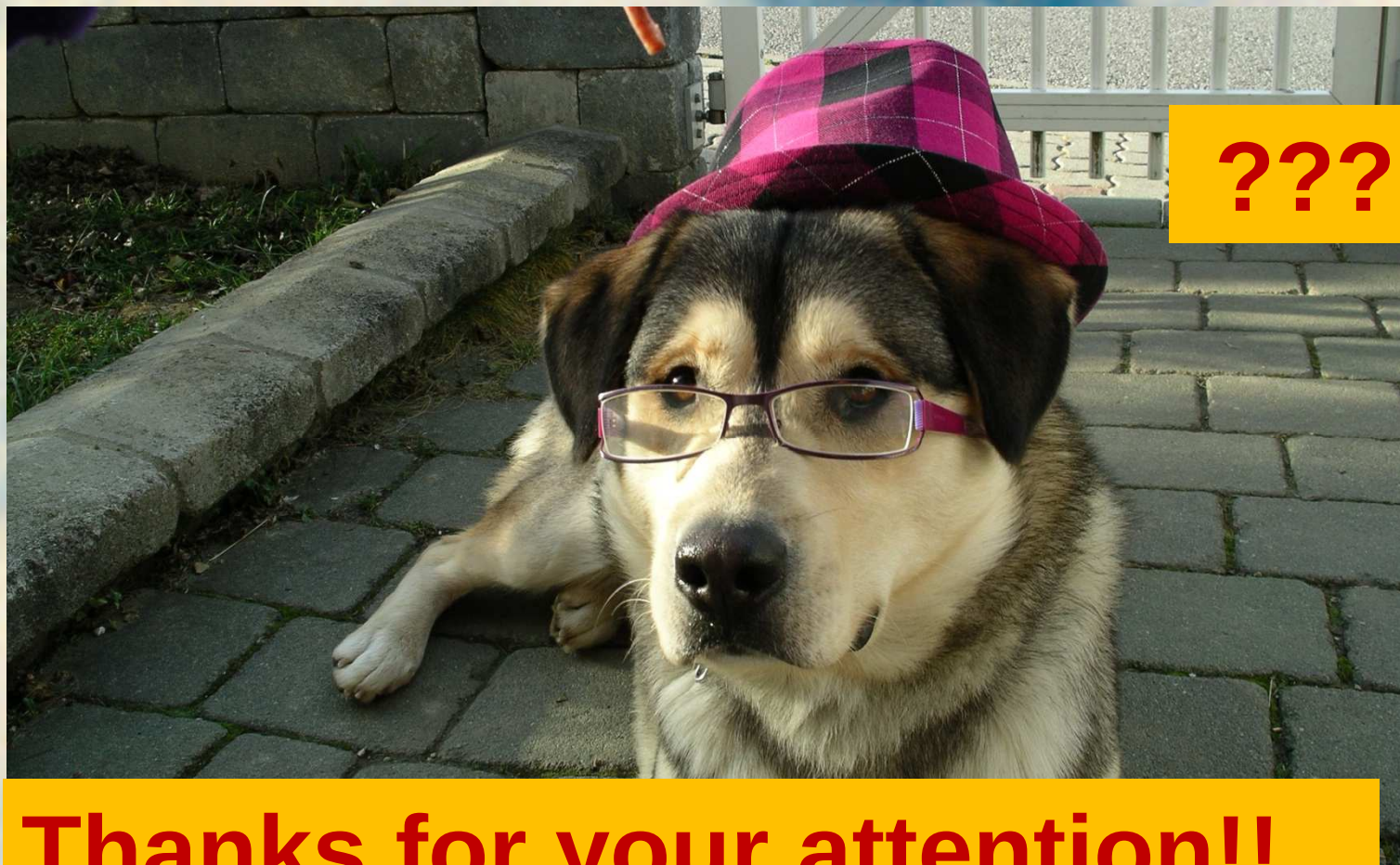


FPL BREEDERS

- × Males and females
- × No bad litter quality
- × Performance decreased:
 - + Laying performance average
 - + Fertilization ↓
 - + Higher mortality / culling
- × Almost never arthritis / synovitis
- × Streptococci / staphylococci
- × Reo sometimes positive
 - + Also in vaccinated flocks problems



QUESTIONS, REMARKS, IDEAS,...??



Thanks for your attention!!