

Changes in the spectrum of serotypes and resistance rates in *Salmonella* spp. from broiler flocks in Austria, 2009-2012

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Zoonoses - common protection of
human and animal health

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Introduction



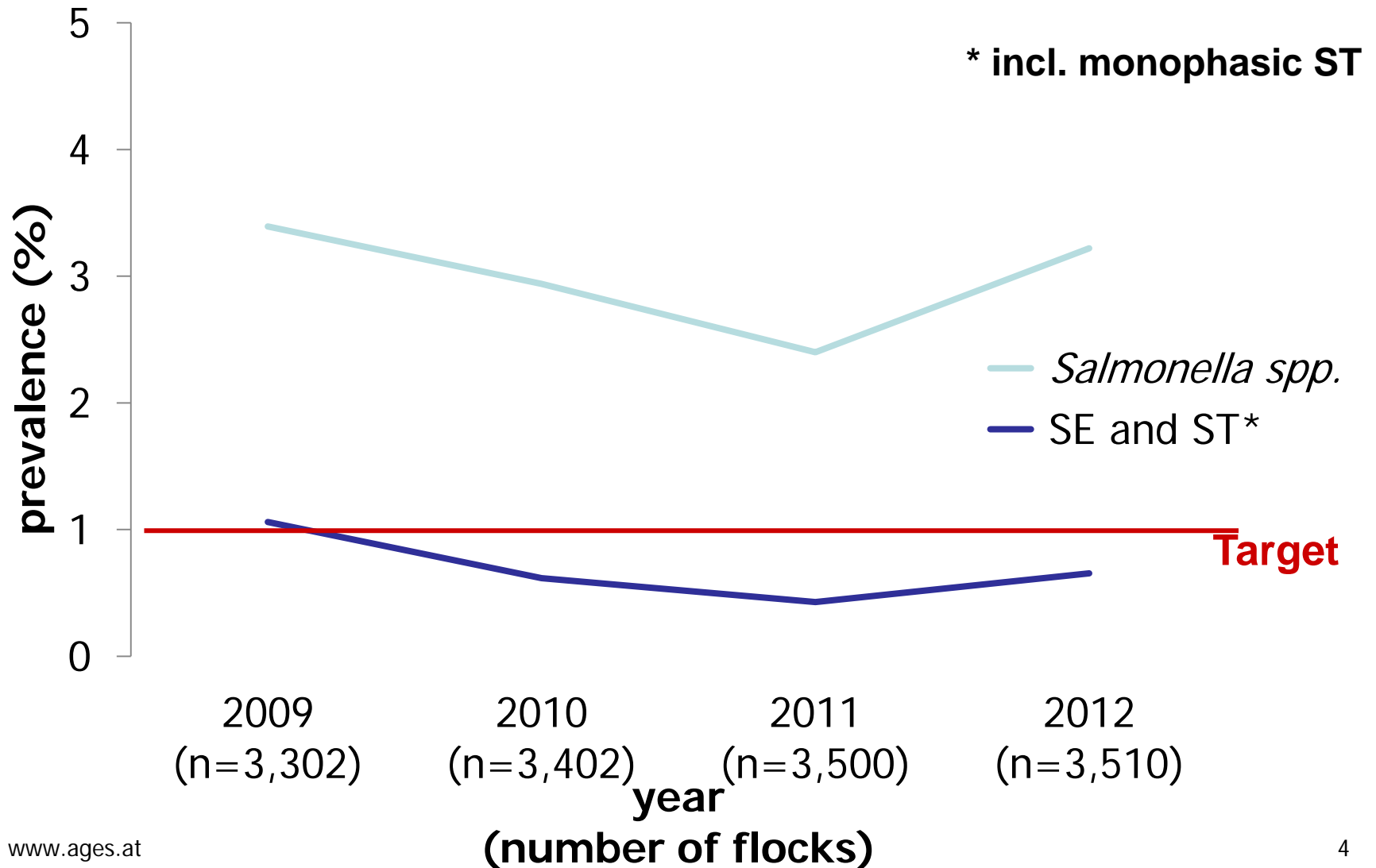
- Control of salmonella in poultry
 - Parent flocks of *Gallus gallus*
 - Laying hens
 - Broiler flocks
 - Turkey flocks
- EU-legislation
 - Regulation (EC) No. 2160/2003
 - Targets: Regulation (EC) No. 517/2011
 - Commission Decision 2007/407/EC

Methodology

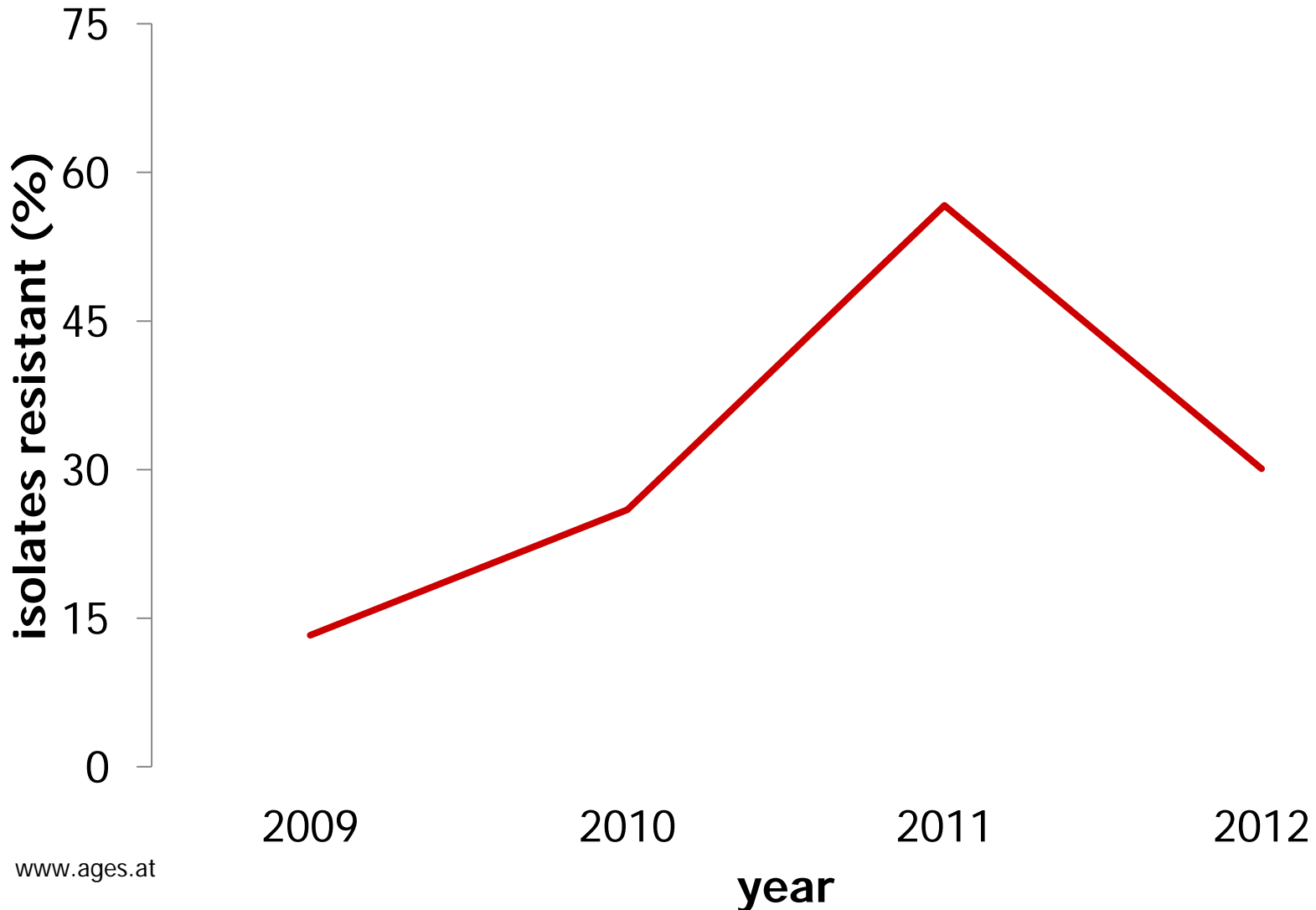


- Isolation: modified ISO 6759:2002
- Serotyping: White-Kauffmann-Le Minor-Scheme
- Lysotyping: according to the methods used by PHE, Colindale
- Susceptibility testing: microdilution method applying CLSI standards and EU-RL cut-off values
- Tested antimicrobials according to EFSA technical specifications (EFSA, 2007)

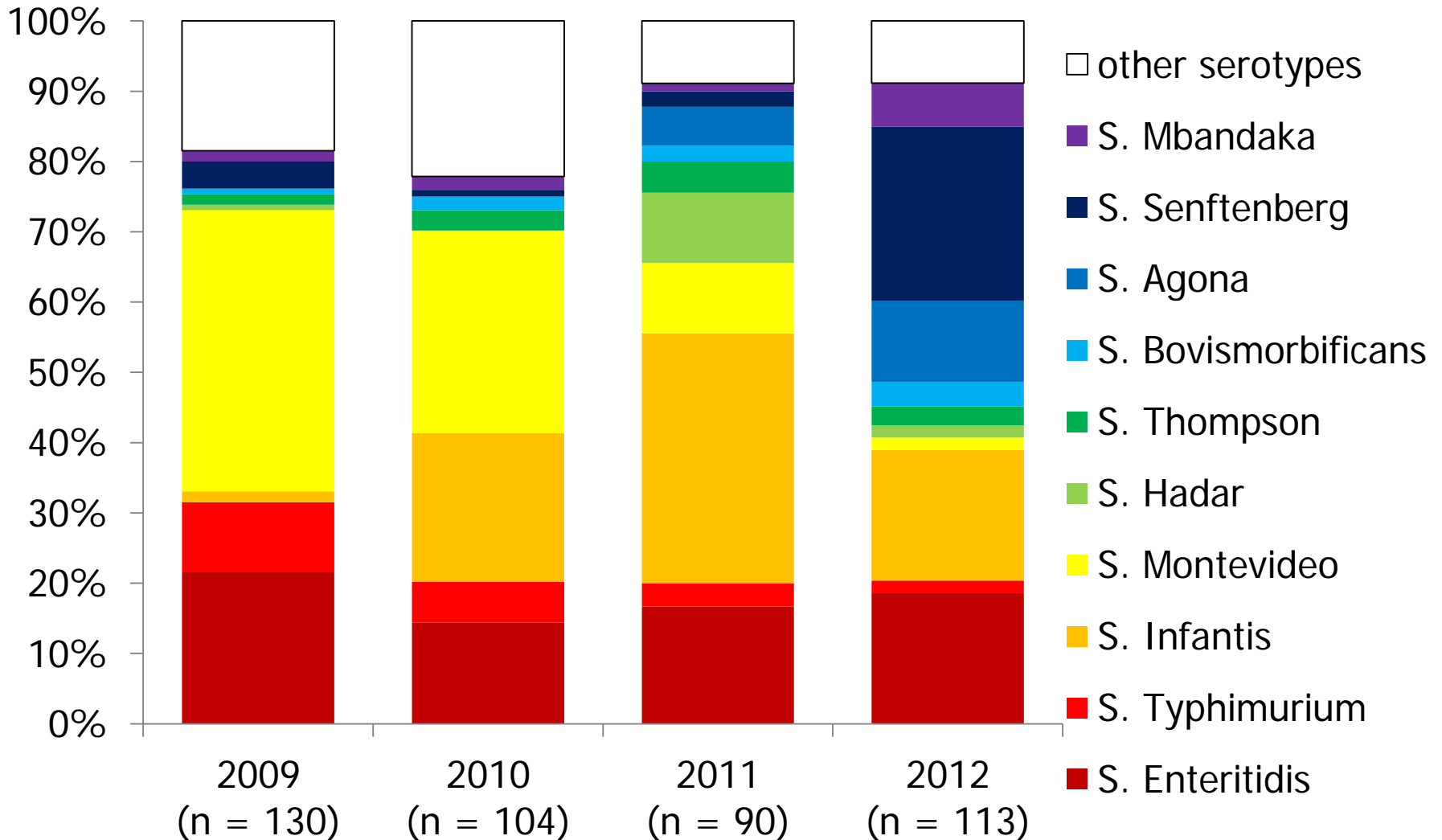
Prevalenz of *Salmonella* spp. and target serotypes in broiler flocks, 2009-2012



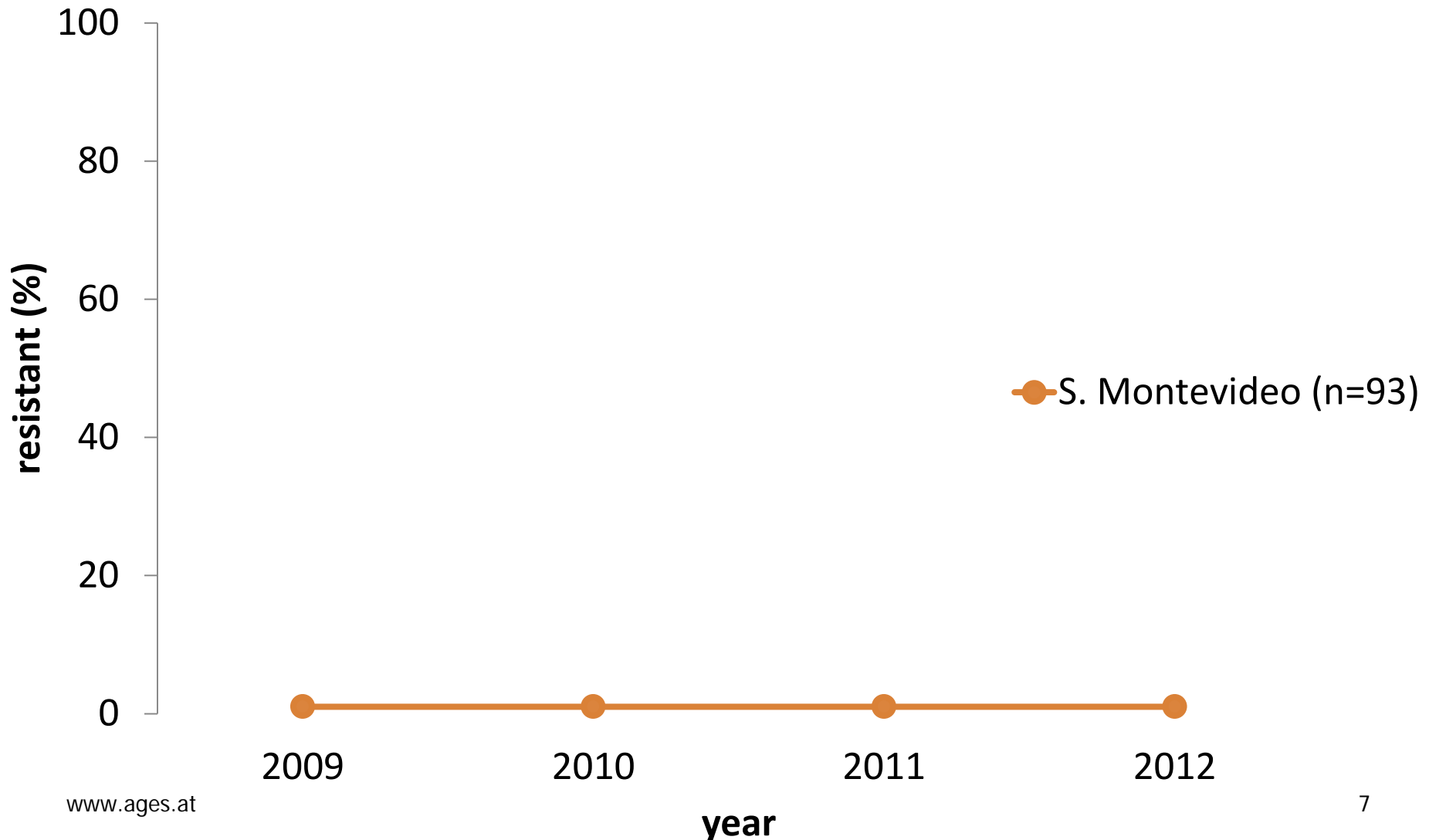
***Salmonella* spp. from broiler flocks showing resistance to one or more out of 10 antimicrobials tested, 2009-2012**



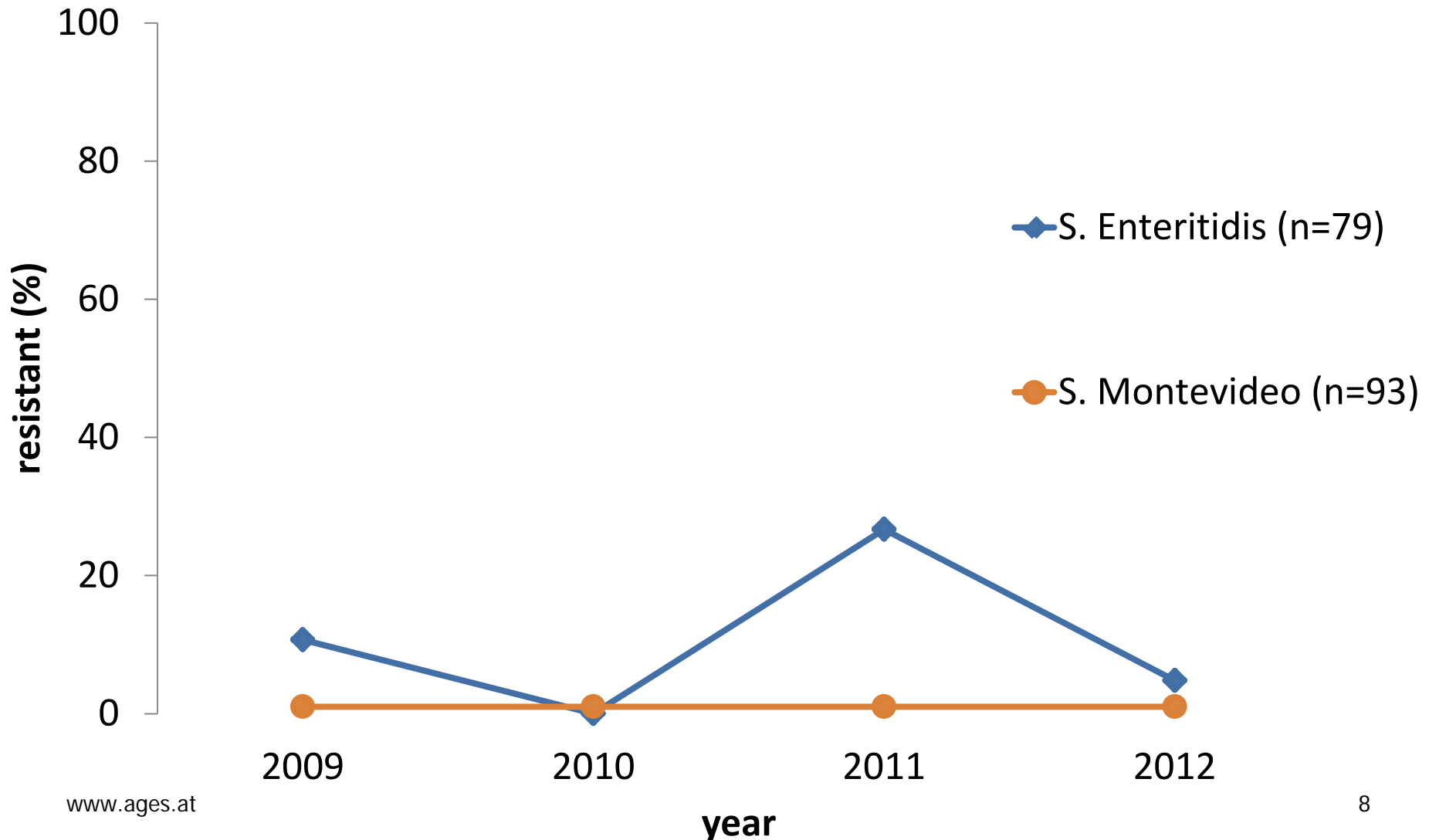
Ten most frequently isolated *Salmonella* serotypes, 2009-2012



Prevalence of resistance in selected *Salmonella* serotypes, 2009-2012



Prevalence of resistance in selected *Salmonella* serotypes, 2009-2012

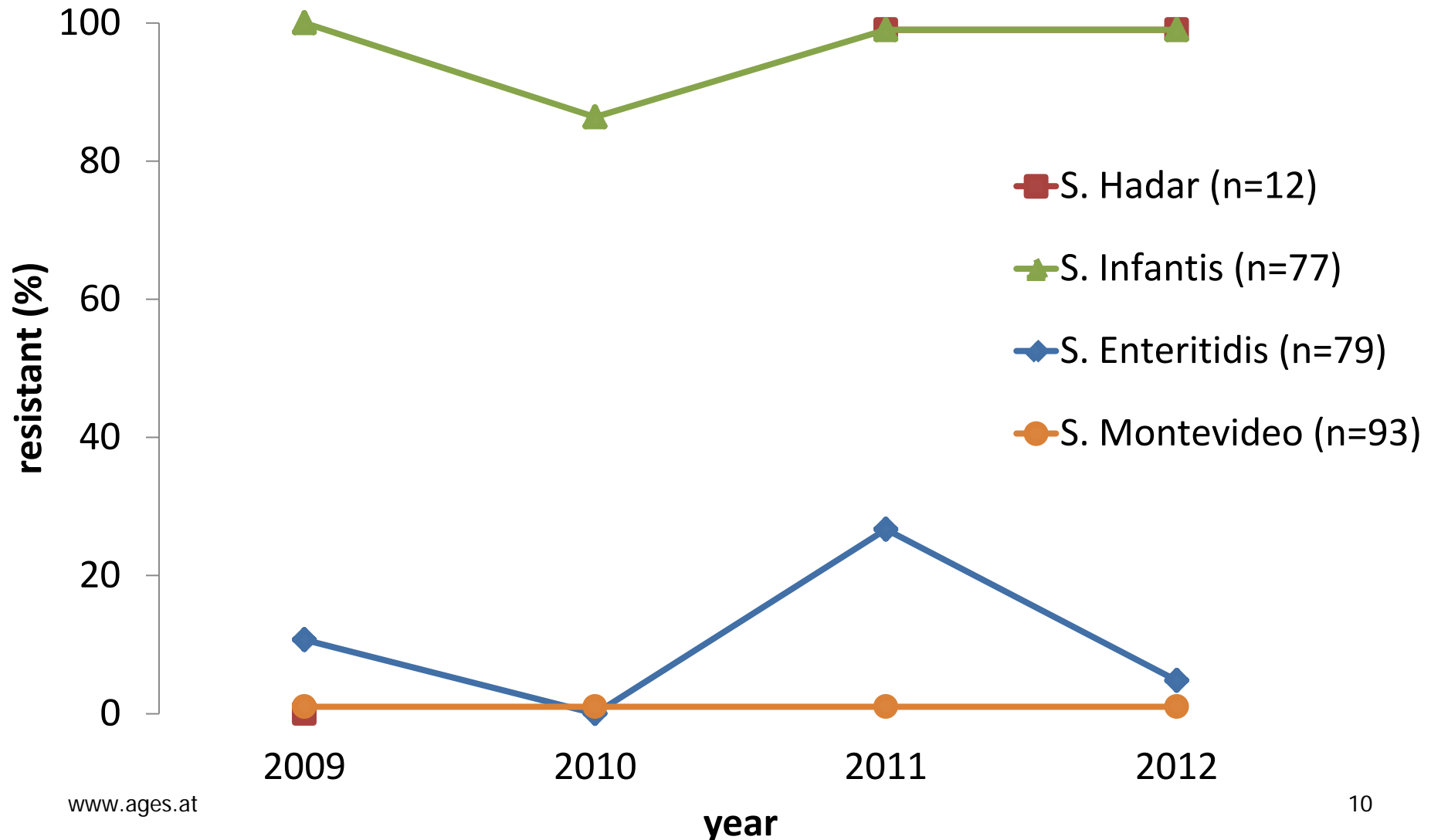


Number of resistant *S. Enteritidis* phage types in broiler flocks, 2009-2012

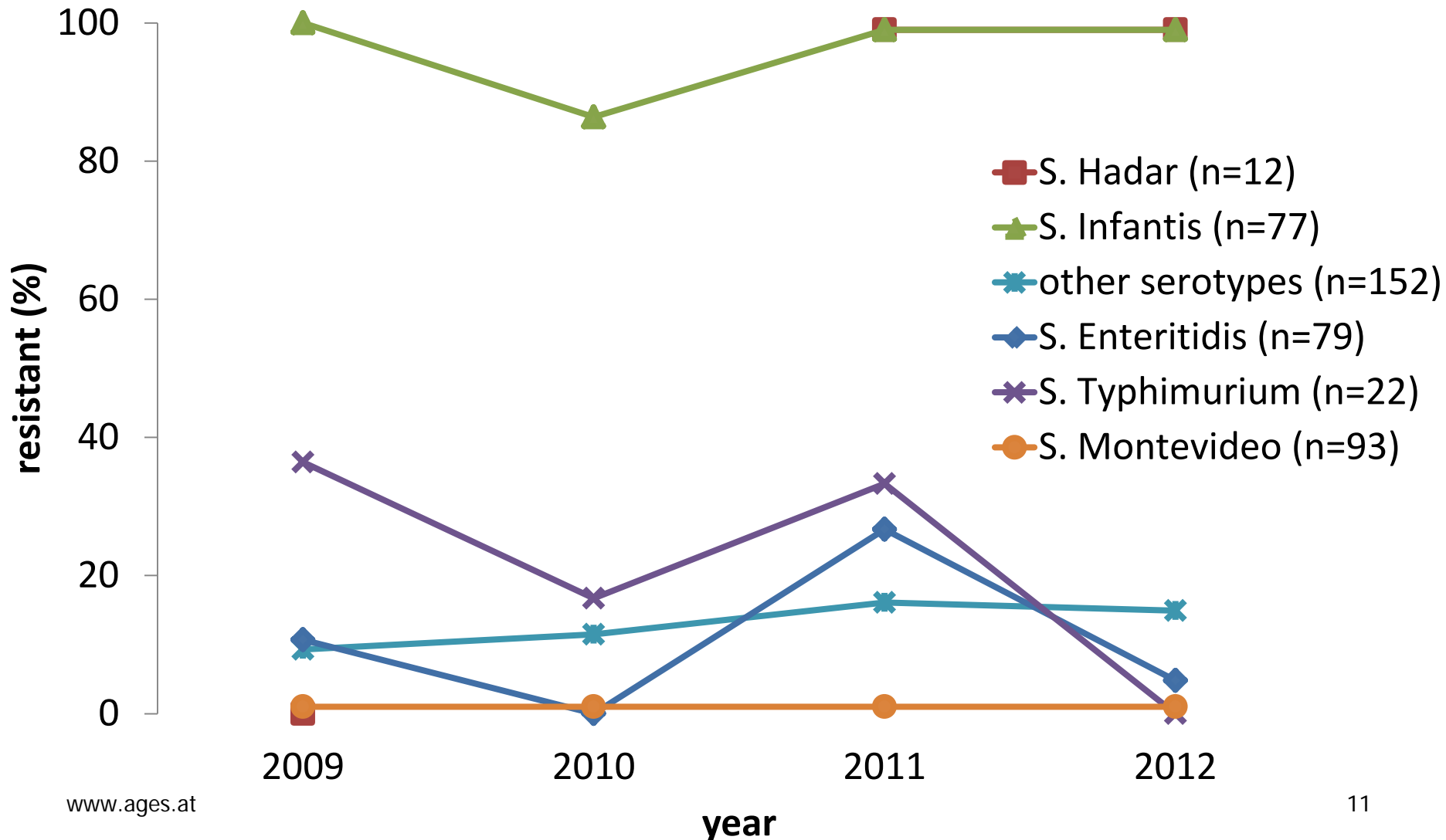


Phage type	2009	2010	2011	2012
PT8 (n=51)	3/23	0/13	0/0	0/15
PT21 (n=10)	0/0	0/0	1/9	0/1
PT12 (n=5)	0/0	0/0	0/0	1/5
PT6 (n=9)	0/5	0/1	1/3	0/0
Other phagetypes (n=4)	0/0	0/1	2/3	0/0
All <i>S. Enteritidis</i>	3/28	0/15	4/15	1/21

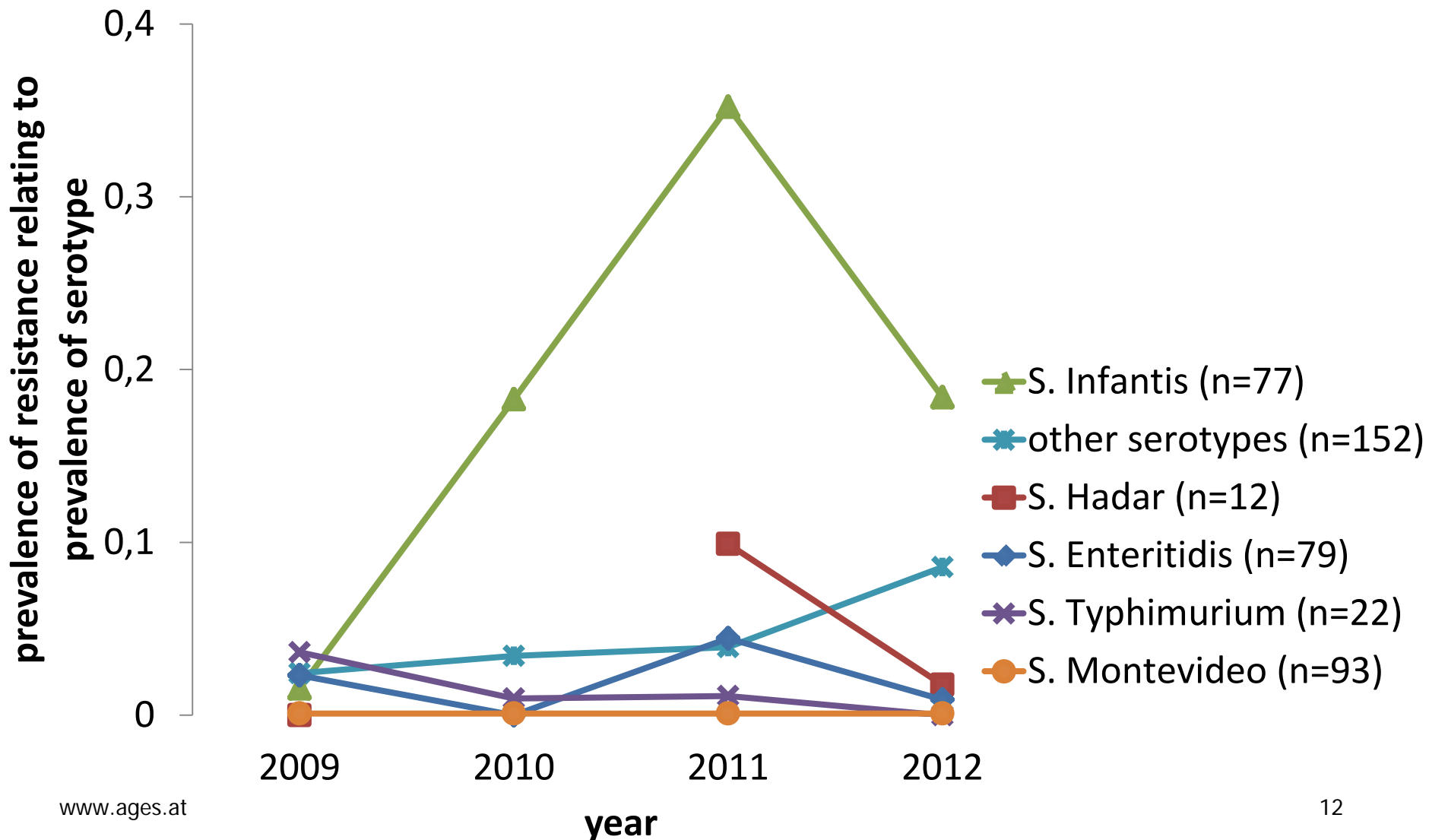
Prevalence of resistance in selected *Salmonella* serotypes, 2009-2012



Prevalence of resistance in selected *Salmonella* serotypes, 2009-2012



Prevalence of resistance relating to *Salmonella* serotypes from broiler flocks, 2009-2012



Summary

- Prevalence of resistance in *Salmonella* serotypes from broiler flocks in AT constant
- No significant increase of acquired resistance observed
- Changes in resistance rates of *Salmonella* spp. due to changes in the composition of serotypes or phage types, e.g. *S. Infantis*, *S. Hadar*
- Fully sensitive *S. Montevideo* was successfully erased in broiler population ⇔ multiresistant *S. Infantis* introduced



Thank you for your attention
Dr. Peter Much

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