

DETECTION OF PRRSV AND SIV INFECTIONS IN DUTCH NURSERIES

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The aim of this study was to assess the incidence of Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) and Swine Influenza Virus (SIV) in Dutch nurseries, including nurseries on organic swine farms (farms producing under the European regulation for biological farming, Reg. EU 2018/848)¹



110 nurseries

- Oral Fluids: 2-3 ropes/farm
- 12-24 pigs/rope (8 weeks of age piglets)
- Refrigerated and sent to lab within 24h
- Submitted to PRRSV RT-PCR and SIV RT-PCR.



Figure 1. The oral fluid samples were collected with ORALCHECK pack.

R Studio v4.3

A descriptive analysis of these 110 farms was performed using R software v.4.3 and the results were presented as percentages and frequencies.

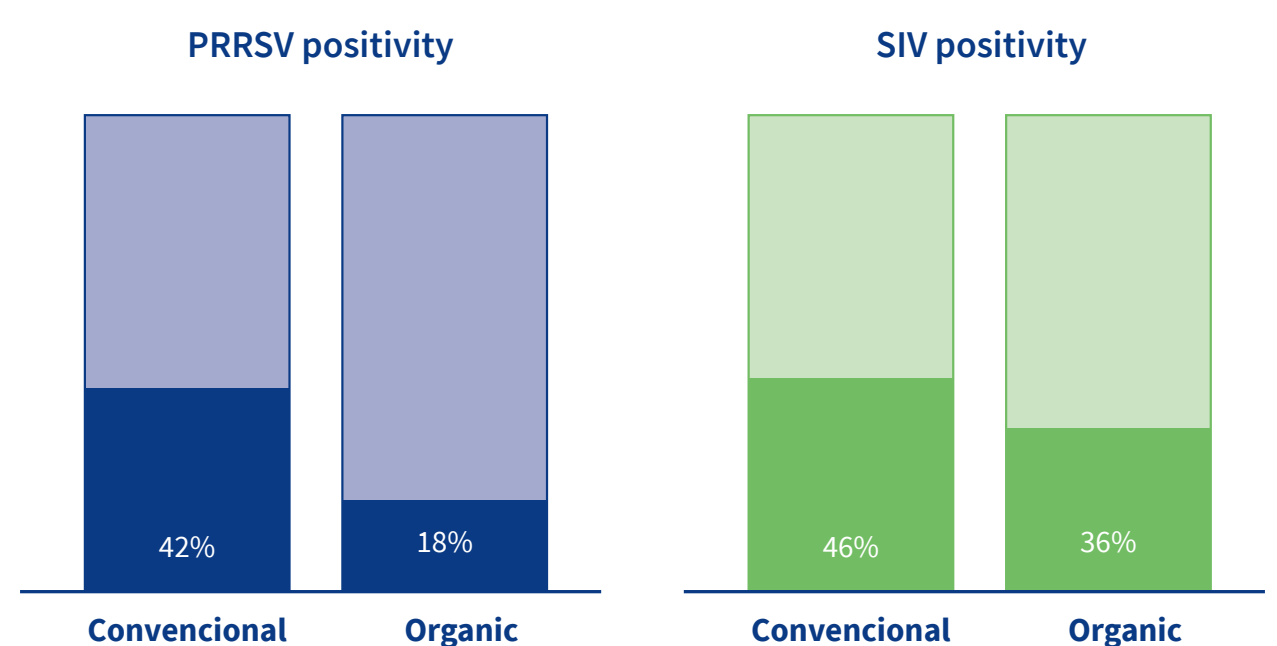
Results

In total, 40% (44/110) of the nurseries were positive for PRRSV and 45.5% (50/110) were positive for SIV. The simultaneous presence of the 2 viruses was identified on 21.8% (24/110) of the farms.

		SIV		
		Positive	Negative	Total
PRRSV	Positive	24 (21.8%)	20 (18.2%)	44 (40.0%)
	Negative	26 (23.6%)	40 (36.4%)	66 (60.0%)
	Total	50 (45.5%)	60 (54.5%)	110

Table 1. Farms positivity to PRRSV and SIV.

Figures 2 and 3. Positivity to PRRSV and SIV both in conventional (n=99) and organic farms (n=11).



Discussion & Conclusion

The results showed a relevant presence of PRRSV and SIV in the nurseries, with a substantial number of farms having simultaneous circulation of both viruses. The real incidence might be underestimated due to the limited sampling strategy (only 1 age group).

As the incidence of PRRSV was considerably lower on organic farms, studying the differences in disease control programmes between organic and conventional farms may lead to new insights into how to implement control measures against PRRSV and coinfecting pathogens.

References

1. Verordnung (EU) 2018/848, Amtsblatt der EU (2018) L150

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