HIPRA

CORRELATION BETWEEN PRRSV AND SIV INFECTIONS AND FARM CHARACTERISTICS ON DUTCH SWINE FARMS

Beek *[1], J.; Nunes [3], T.; Schuttert [2], A.; Van Esch [1], E.; Giralt [3], D.; Nodar [3], L.; Miranda.[3], J

[1]HIPRA, Benelux; [2]De Oosthof, The Netherlands; [3]HIPRA, Amer (Girona), Spain
*Corresponding author: josine.beek@hipra.com

Background & Objectives

The goal of this study was to assess positivity for Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) and Swine *Influenza Virus* (SIV) in nurseries of Dutch farms and its association with the farms' characteristics and production system.

Materials & Methods

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.

After the sample collection a survey was filled for each farm, collecting data on farm characteristics.

Results

70 farms (63.6%) were positive for at least one of the viruses, including 24 farms (21.8%) that were simultaneously positive for both.

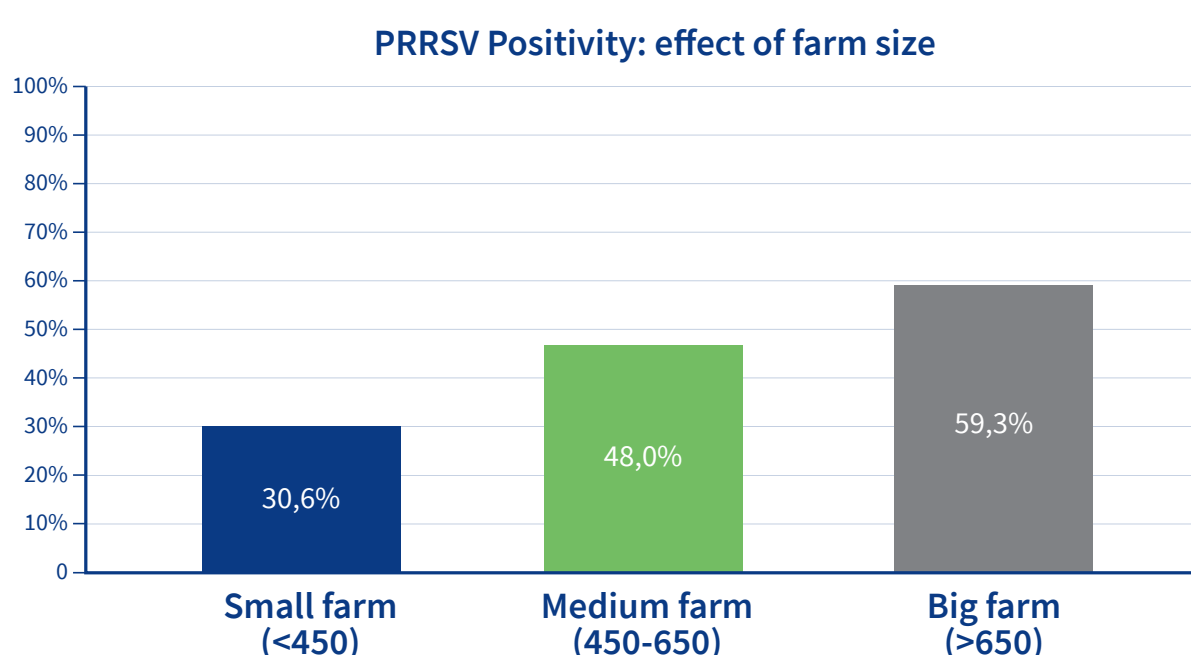**Figure 2.** Positivity to PRRS in nursery: effect of farm size (p=0.04).

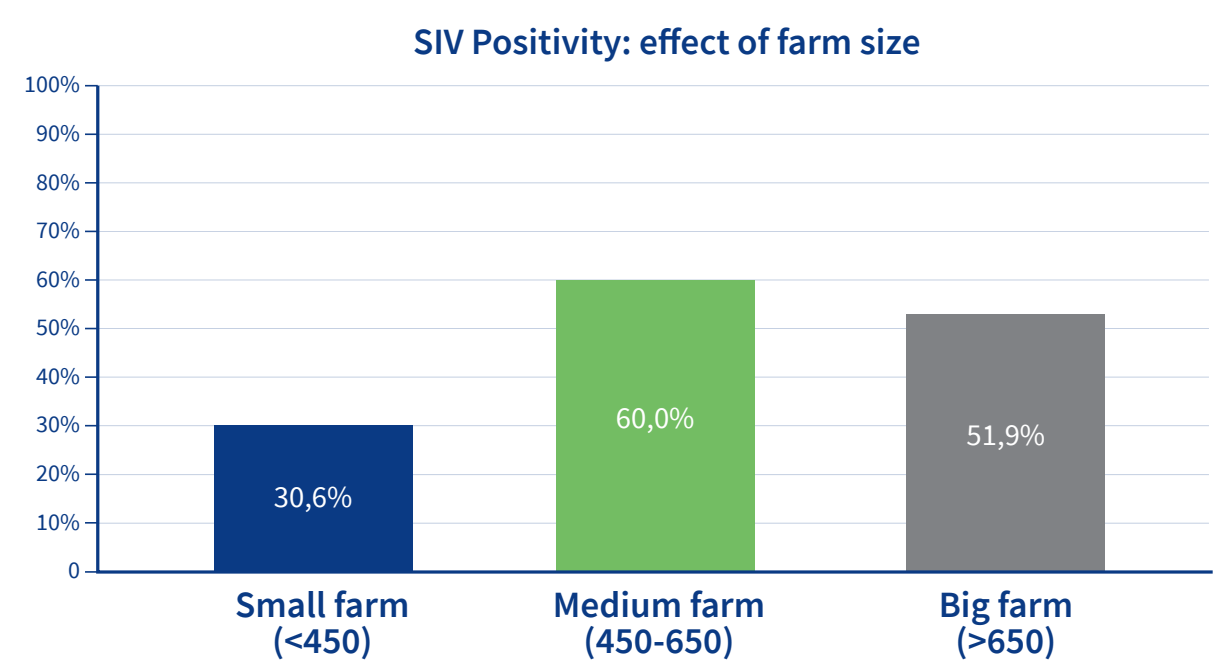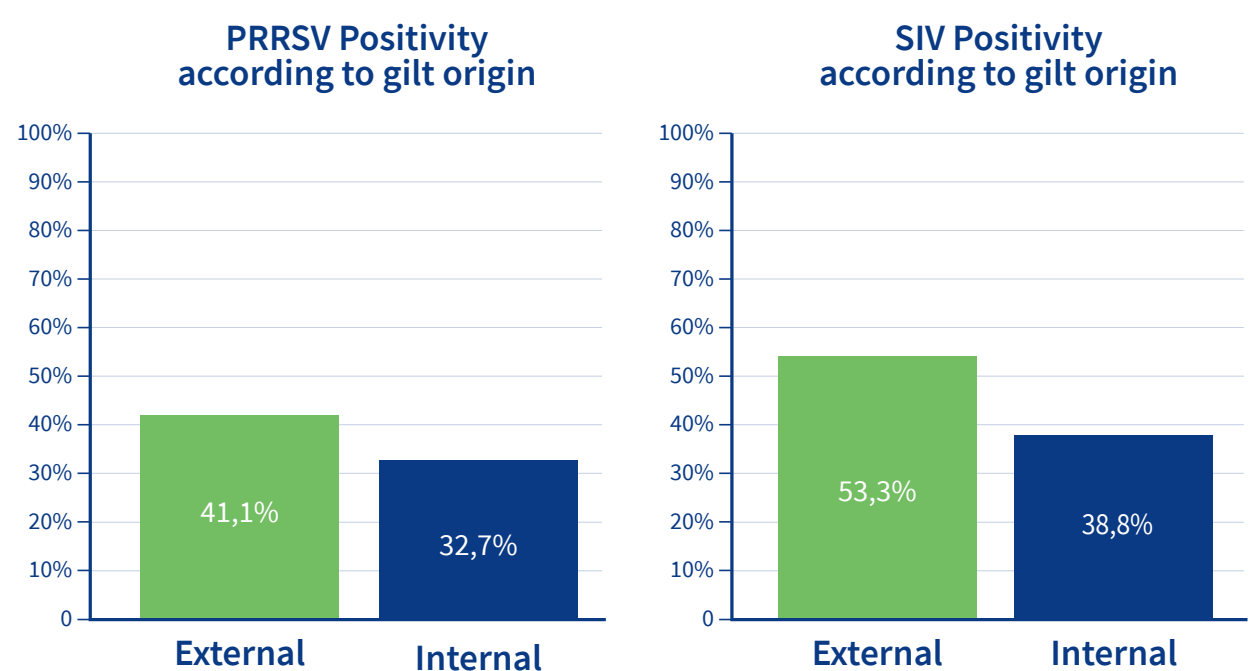**Figure 3.** Positivity to SIV in nursery: effect of farm size (p=0.03).

Figure 4 and 5. Positivity to PRRSV and SIV in nursery: effect of gilt origin. (p>0.05 for both).

Some farms (n = 8) had off-site nurseries. These off-site nurseries (site 2) had lower PRRS positivity than nurseries inside sow farms (site 1+2), but without statistical significance (12.5% versus 42.6%; p=0.07).

Discussion & Conclusion

The results suggest a relevant presence of PRRSV and SIV in the nurseries, with almost 1/4 of farms having simultaneous circulation of both viruses.

Farm characteristics, such as herd size, origin of the gilts, and segregated production (off-site nurseries) may also play a role in the positivity of the nurseries and should be taken into account in disease control programmes.

Code assign: HHM-PP-30