

## **Detection of *Ascaris suum* in slaughtered pigs from Walloon indoor, outdoor or organic pig farms using coprology, serology and liver scoring**

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From October to December 2019, the presence of *Ascaris suum* was detected in 55 Walloon indoor (32), organic (18) or outdoor (5) pig herds. Faeces and sera from maximum 10 fattening pigs per farm were collected and liver scoring was performed. Coprological examinations using McMaster test allowed to estimate the number of eggs per gram of faeces (EPG) individually (n=450) and for maximum 5 pooled samples (n=81). Serological analysis (n=518) using Elisa test SERASCA® were performed. A total of 1583 livers were scored using 4 scores: 0 (no milkspots), 1 (<10 milkspots), 2 (>10 milkspots) and 3 (most of the liver surface covered with milkspots). A phone survey was addressed to farmers concerned by the study.

In 48% of the tested pig farms *Ascaris* eggs were identified in faeces: 12 indoor pig farms out of 30 tested (40%), 11 organic pig farms out of 17 (65%) and 2 outdoor pig farms out of 5.

Serological analysis has shown that 8 herds/10 have been exposed to the parasite whatever the herds type. Indoor, 25% herds had a low or absent contamination level, 25% had a moderate level of infection and 50% herds presented a high infection level. In organic herds, herds proportion were respectively 17, 28 and 56%. In outdoor pig farms, the 5 tested herds were highly exposed to *Ascaris suum*. According to liver scoring 96% groups of pigs tested had liver lesions but in 40% tested groups only score 1 was registered. The present results and the response to the survey will allow more specific anti-*Ascaris suum* strategies.