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TITLE PRRS 'PIGLET MONITOR' IN NORTHERN BELGIUM

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CONTENT

Pig farms in Northern Belgium (Flanders) are often endemically infected with PRRSV. DGZ developed "Piglet Monitoring", a voluntary project, to provide swine veterinarians with a tool to determine the PRRS status of the herds.

Twice a year, the veterinarian sampled 30 nursery piglets: three groups of ten piglets of approximately four, eight and twelve weeks old. Blood samples were individually examined for the presence of PRRS antibodies (ELISA) and pooled per three for the presence of the virus (PCR). Within every sampling, the positive pool with the lowest Ct-value was sequenced (ORF5).

This study shows the results from the start of the project (January 2015) until November 2017.

One hundred and eighty participating herds performed 409 samplings. PRRS antibodies were detected in 98% of the herds (n=180, at least one animal with an S/P ratio > 0.4). Almost 80% tested PCR positive (at least one pool) in their first sampling. More than 1/3 of the herds had PRRS PCR positive piglets at the age of four weeks and 1/3 became PCR positive from eight weeks onwards. In their second sampling, 71% of the herds (n=137) were PCR positive.

A total of 38 herds had at least two samplings and didn't have PCR positive samples in the last sampling. Twenty eight of these herds evolved from at least one PCR positive age categorie to no PCR positive results. A total of seven herds remained negative during sequential samplings, three had alternating results. The sequencing of 762 PCR positive samples (pools or individuals from pools) provided 446 valid sequences. Among them, 83.4% corresponded to genotype 1 (clustered within subtype 1.1) and 16.6% to genotype 2.

These results confirmed PRRSV is present on most Flemish herds. Continued monitoring and guidance by the veterinarian can result in the control of PRRS on farm level.