

SWINE HEALTH

Title: A Plan for Obtaining More Accurate and Specific Results on PRRSV Serological Tests When Using Commercial ELISA's - **NPB# 01-007**

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Abstract

Attaining and maintaining negative herd status for PRRSV is now a major goal for many producers. To achieve such health status, it is important to count on a reliable PRRSV serological test. There is one commercial kit for PRRS serology (manufactured by Idexx labs) which is extensively used worldwide. The Idexx assay consistently presents the inconvenience of exhibiting a high rate (2 % or more) of false positive animals which translates into a significant incidence of isolated reactors (singletons) in herds that should otherwise test negative. The occurrence of these singletons poses a significant problem for the certification and commercialization of pigs. In the last few years alternative serological ELISA kits became commercially available outside the US.

The goal of this project was to assess whether two new foreign tests could detect PRRSV infections with good level of specificity and sensitivity. We were interested in testing if these assays could be used as alternative sero-tests to confirm the real serologic status of the PRRSV singletons that are frequently obtained through the use of the Idexx test. To this end, we used a large collection of sera of previously known PRRSV reactivity. Neither the Biovet (Canada) or the HIPRA (Spain) tests showed sufficient sensitivity of detection of infected animals in order to confidently allow their use in lieu of the Idexx test. Our conclusion is that for the time being the Idexx test continues to be the sole acceptable commercial ELISA test for PRRSV certification. Singletons can still be ruled out by the complementary use of indirect fluorescent assays.

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