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SCHMALLENBERG VIRUS IN SWEDISH DAIRY HERDS

Aim

To estimate the prevalence and geographical distribution of Schmallenberg antibody positive dairy herds.

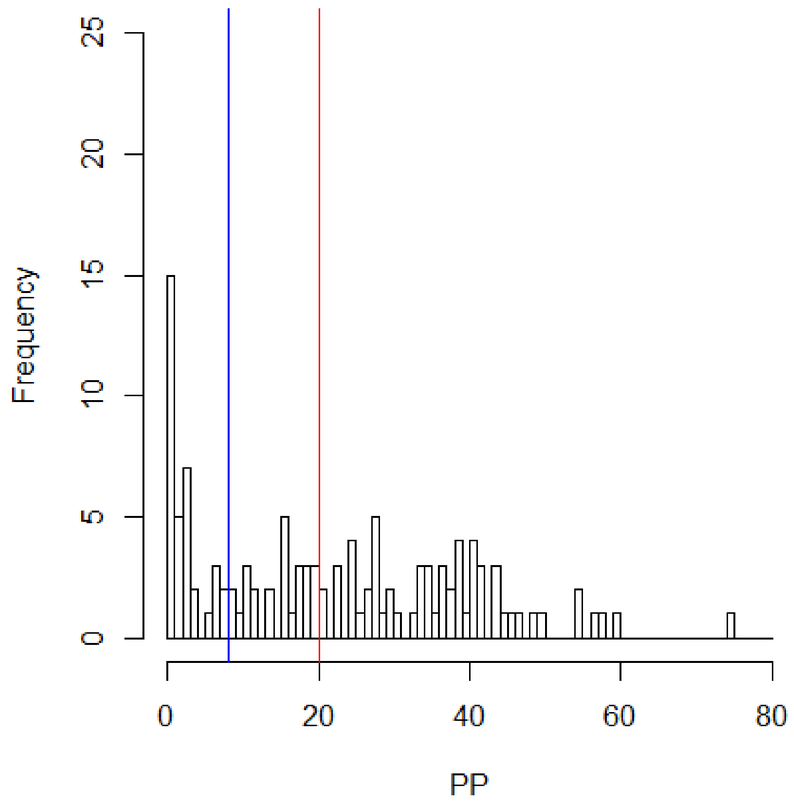

Figure 1. Distribution of herd antibody results based on an indirect ELISA. The cut-off for mildly positive was ≥ 8 PP < 20 (blue line) and strongly positive (red line) ≥ 20 PP.

Material and Methods

- 120 dairy herds (sampled from another study with herds in milk recording with at least 40 cows).
- Bulk tank milk (BTM) sampled in May 2013.
- Indirect ELISA (SVANOVIR® SBV-Ab).
- Cut-off value for positive test ≥ 8 PP (percent positivity), according to the manufacturer.
- The PP was calculated as corrected optical density (OD) / positive control OD. The OD (at 450 nm) was corrected by subtraction of the negative control OD.

Results

- 87 (73 %) herds were positive (Fig 1).
- Negative herds geographically located in the North, strongly positive herds in the South and mildly positive in the middle (Fig 2).

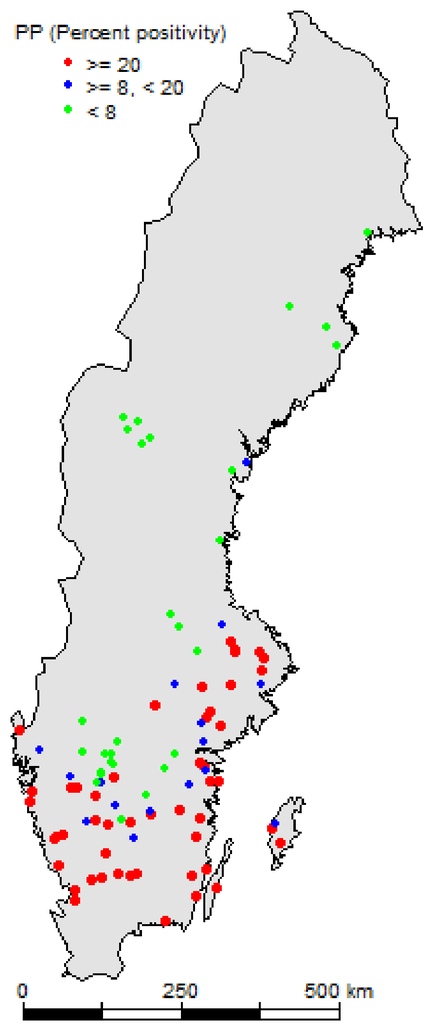

Figure 2. Geographical distribution of SBV antibody negative (PP<8), mildly (8 ≤ PP < 20) and strongly (PP ≥ 20) positive herds.

Discussion

- A spatial gradient with positive herds with results close to the cut-off value located near areas with negative herds.
- It would therefore be interesting to study:
  - the within-herd prevalence and how this corresponds to BTM results
  - if there is a geographical difference with fewer positive animals further North.

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