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## Abstract Book



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STÁTNÍ VETERINÁRNÍ ÚSTAV JIHLAVA  
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POSTERS - VECTOR-BORNE AND OTHER EMERGING DISEASES

## P048 DETECTION OF PORCINE EPIDEMIC DIARRHEA VIRUS (PEDV) IN SERBIA

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### INTRODUCTION:

Porcine epidemic diarrhea (PED) is highly contagious enteric disease of swine, caused by porcine epidemic diarrhea virus (PEDV) that results in severe enteritis, diarrhea, vomiting, and dehydration with high mortality in piglets. The aim of this work was to examine does PEDV is present in pig's population in Serbia.

### MATERIALS AND METHODS:

In January 2016 faecal samples of pigs were collected from three big commercial farms in Vojvodina Province, where severe watery diarrhea in animals were observed. Detection of PEDV was done by conventional multiplex RT-PCR that simultaneously detect and distinguish PEDV, TGEV and rotaviruses. For reaction, commercial "OneStep RT-PCR kit" (Qiagen, Germany) was used and primers that amplified 651 bp fragment of spike protein (S) gene of PEDV, 859 bp fragment of S gene of TGEV and 309 bp fragment of gene segment 6 of porcine rotavirus

### RESULTS:

PEDV was detected for the first time in Serbia in fecal samples from one out of three examined farms. On PEDV positive farm clinical signs of severe diarrhea in pigs of all categories, vomiting and high mortality in suckling piglets were observed. Direct sequencing of partial spike protein gene (320 nucleotides) and phylogenetic analysis shows that the virus recovered from PED outbreaks in Serbia is very similar to other currently circulating PEDV strains from Western and Central Europe.

### DISCUSSION AND CONCLUSIONS:

Results obtained in this study are important for the evaluation of the risks associated with the spread of PEDV, and potential severe health disorders and high economic losses that could be expected in pig production in Serbia.

### REFERENCES: