



Scientific Consortium:
"Healthy Animal - Safe Food"

Director General
Krzysztof Niemczuk, DVM, PhD, ScD

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PROPOSALS FOR SCIENTIFIC COOPERATION ON AFRICAN SWINE FEVER

Dear Participants,

Answering my declaration I would like to present you our proposals for scientific cooperation between countries participating in meeting in Tallinn.

Proposed fields of cooperation are:

- 1) Investigation of ASF spread and its spatio-temporal-related aspects in Poland and Estonia, Lithuania and Latvia taking into account natural corridors of ASF transmission in wild boar population. Determination of seasonal ASF spread, the area of infection and the role of human in transfer of the virus to the previously ASF-free areas.
The aim of this study will be the development of possible scenarios of further ASF spread in wild boar population on the territory of Poland and Estonia. The current spatial and geographic conditions will be analysed including afforestation, natural geographic barriers, such as rivers or lakes, the human neighborhood and the presence of landfills, as well as the potential access to the waste food. The seasonality of ASF cases in wild boar will be also analysed.
- 2) Monitoring studies and determination of possible mechanisms related to the occurrence of ASF cases diagnosed as serologically positive only with negative virological and molecular results.
To cope with this task serological tests recommended by the OIE, such as ELISA and immunoperoxidase test (IPT) or immunoblotting assay (IB) will be used. Application of tissue exudates collected from internal organs of wild boars diagnosed as serologically positive will be used as the material for the confirmation of serologically positive ASF cases.
- 3) The study on genetic ASFV markers for the identification of the phylogenetic origin and evolution of emerging ASFV isolates.
The objective of this study will be to analyse the potential genetic ASFV using PCR templates sequencing and comparison. The obtained results may aid to define the evolution as well as phylogenetic origin of the emerging ASFV isolates.
- 4) Application of fast serological and molecular tests for the preliminary ASF diagnosis in blood collected from hunted wild boars.

The goal of this study will be the development and application of rapid serological and molecular "pend-side" tests for the preliminary diagnosis of ASF in hunted wild boars.

57, Partyzantów Avenue
24-100 Pulawy, POLAND
<http://www.piwet.pulawy.pl>

phone +48 81 889 32 65
fax +48 81 887 71 00
sekretariat@piwet.pulawy.pl



OIE Reference Laboratory for
Classical swine fever,
Enzootic bovine leucosis,
Porcine reproductive and respiratory syndrome

5) Package proposal on a future cooperation within the area of research-scientific activities related to:

- *the role of wild boar in the spread and persistence of ASF virus in a region;*
- *the correlation between ASFV virulence and wild boar mortality*
- *ASFV tropism and the functional relationships between viruses and hosts*
- *the development of risk-based ASF eradication measures.*

With kind regards,

Krzysztof Niemczuk DVM, PhD, ScD


DIRECTOR GENERAL