Background

African swine fever (ASF) is a devastating haemorrhagic disease of suids endemic to Africa. After the introduction of ASF into Georgia in 2007 (Fig. 1), the disease spread in the Caucasus and Eastern Europe, causing severe damages to the pig industry, pig trade and rural economies in Georgia, Armenia, Azerbaijan, Russia, Ukraine and Belarus. ASF spread from domestic pigs to Eurasian wild boar (Sus scrofa). Since then, wild boar have been implicated in the spread of ASF in Europe (2).

The continuous and dense wild boar meta-population in Europe (2), estimated to approximately 3.5 million individuals, is favourable for ASF spread. The lack of vaccines and other potential control tools prompts to develop efficient ASF control approaches focused on wild boar management. The spread of ASF in the EU, with its 149 million pigs and an annual export of over 2.17 billion Euro, could be devastating.

This presentation aims to: i) show an update of the status of ASF in wild boar in Europe; and ii) present a recently started initiative, ASF-STOP.

Approach

The OIE (http://www-oie.int) was checked to update the current status of ASF in wild boar in eastern Europe and the Caucasus. Every ASF reported case in wild boar in Europe and the Caucasus from 2007 up to August 2016 was compiled from the Wahis interface of the OIE. Any individual wild boar shot or found dead that was found positive to ASF virus by reference laboratories was considered as a case.

The ASF-STOP Cost Action (CA15116) was launched in May 2016 to promote improvement on knowledge, diagnosis, surveillance and management of ASF in Europe. The action gathers expertise from leading European teams in the different topics related to ASF to promote protection of the European pig industry against ASF.

Major outcome

From 2007 to August 2016, 5,399 cases of ASF in Eurasian wild boar have been reported to the OIE by Armenia, Estonia, Latvia, Lithuania, Poland, Russia and Ukraine (Italy not included; Fig. 1). Estonia reported the highest number of cases (n=1,747; 2014-2016), followed by Latvia (n=1,624; 2014-2016), Russia (n=1,306 cases; 2007-2016), Lithuania (n=507; 2014-2016), Poland (n=185; 2014-2016), Ukraine (n=28; 214-2016) and Armenia (n=2; 2010).

ASF-STOP is a 4-year networking Action funded by the EU COST Programme. ASF-STOP gathers scientists with outstanding expertise from 28 European countries, 2 neighbour countries and 2 international partner countries (Fig. 2). Its main aim is to achieve a better understanding and combating of ASF in Europe. ASF-STOP involves many topics and disciplines related to ASF, including virology, vaccinology, immunology, diagnostics, pathology, epidemiology - and its hosts - both wild and domestic suids. ASF-STOP is structured in 5 Working Groups (Fig. 3) and has a strong component of wildlife work and expertise, for example wild boar ecology, biology, management and ASF epidemiology and pathobiology.

Main conclusions

ASF spread in wild boar presages future incursion into new areas in eastern EU member estates, e.g. Romania, Hungary, Slovakia, south-eastern Poland and Finland. ASF-STOP Cost Action will provide insights to control ASF spread in the EU by gathering leading research and industry expertise together.

References