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African swine fever: a reemerging risk from East Europe

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African swine fever (ASF), one of the most complex infectious diseases of livestock is causing problems in Eastern Europe. Despite being considered as an exotic disease, this is not the first time ASF virus (ASFV) is present in the European continent. From 1960 to the mid-1990s ASFV was established in the Iberian Peninsula, and since 1978 the Italian island of Sardinia has been endemic. However, during the last decades ASFV was not present in Europe, with the exception of Sardinia, until the new arrival of the virus to the Georgian coasts in 2007.

Since the first introduction of ASFV in the Caucasus region five years ago, the economic losses have been huge, affecting both domestic and wild boar from five different countries, spreading to northern and western regions (Fig. 1). In the first stages of the disease, an endemic area in the south of Russia was established and more than 300.000 animals were sacrificed in order to prevent the spread of the virus. Despite these efforts, ASF is still not controlled, as it was demonstrated by the appearance of more than 40 outbreaks in northern regions, many of them concentrated in Tver region, far away from the initial endemic area. Since the beginning of the problem, Russian Federation is making some improvements, mainly in ASF diagnosis and disease communication strategies. These

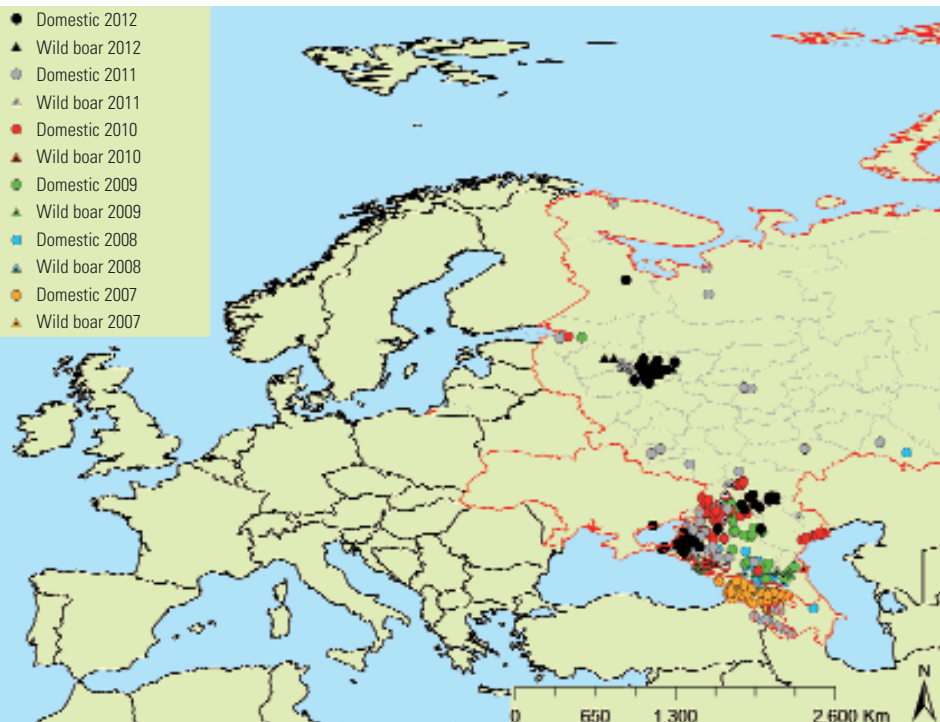


Fig. 1

Map representing the ASF notified outbreaks in East Europe since 2007. Countries with at least one outbreak were outlined in red color.

(Source: own elaboration, data from WAHID)

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This concerning situation, especially the uncontrolled spread of ASFV within the Russian Federation during 2011 and 2012, implies a serious risk for ASFV introduction into surrounding and nearby countries as Belarus, Moldova, some European Union (EU) countries and Ukraine, where a recent outbreak occurred in July 2012. This epidemiological change has also increased the risk of introduction into East Asia.

The risk of ASFV introduction into free countries is much related with three specific pathways. The first one includes the illegal movement of pigs and mainly meat or pork products where ASFV survives long periods of time. Although swill feeding is forbidden within EU, these illegal imported products as well as other contaminated waste from international planes and ships, could be illegally used in some regions for feeding pigs due to the lack of knowledge, leading to the infection of susceptible populations. The second one comprises contaminated transports, mainly vehicles transporting animals to Russia or material from mixed enterprises which could also pose a risk if they are not properly disinfected when returning to the country of origin. The EU, aware of this risk, approved in 2011 a new decision regulating livestock vehicles coming from Russia. The third and, also the most complex route to be controlled, is the natural movement of wild boar. Wild animals do not understand of barriers or country borders, so health status and behavior of these animals should be continuously studied.

The existence of these routes, together with the uncontrolled situation of the disease in the Russian Federation and other Trans-Caucasian countries led to a risk situation for ASF-free Asian countries and, above all, for European countries too. These countries should be aware of that risk and put the appropriate measures in place to avoid or prevent the entrance or

further spread in their countries. Early detection on filed, good laboratory diagnosis and updated contingency plans are essential to effectively control the disease and reduce the negative consequences associated to this entrance.



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