

Disease surveillance and population management structuration programs of wild boar (*Sus scrofa scrofa*) in the Classical Swine Fever free area in Brazil - Silva V.S.¹, Pellegrin A.O.², Mourão G.M.², Tomas W.M.², Campos Z.M.S.², Rech R.R.¹, Trevisol I.M.¹, Esteves P.A.¹, Juliano R.S.², Piovesan U.², Pandolfi J.R.¹, Dalmédico G.¹, Dambrós D.¹, Ferreira F.³, Fontana I.³, Gonçalves V.S.P.⁴, Corbellini L.G.⁵, Marques J.R.M.¹, Schaefer R.¹, Peixoto J.O.¹, Filippini A.⁶, Salvador C.H.⁷, Tortato M.⁸, Jorge R.S.P.⁹, Santos F.¹, Celant T.¹, Villas Boas J.¹, Souza G.N.¹⁰, Gatto L.¹¹, Veschi J.L.A.¹², Gomes C.C.G.¹³, Rosot M.A.D.¹⁴

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Sus scrofa is considered one of the 100 worst invasive alien species in the world. The wild boar (*Sus scrofa scrofa*) and its hybrids are exotic to the Brazilian fauna, present in many Brazilian states, and spreading as a devastating invasive population. It can act as reservoirs of several pathogens that affect domestic animals, wild species as well as human population. Although surveillance for Classical Swine Fever (CSF) and other important diseases should include wild pig population, there is no information on health profile of this species in Brazil, which represents a threat to domestic livestock and international trade. Therefore, the objective of this proposal is to structure and implement the epidemiological surveillance and control population of wild boar in the CSF-free area. For that, a network of various governmental organs and non-governmental organizations were mobilized to act synergistically. The proposal of this project includes: 1. elaboration of legal support, 2. elaboration of guidelines and contingency plans for diseases, 3. training of field teams involving hunting organizations 4. Characterization of the distribution of the wild boar population, 5 development and implementation of geographic information system, 6. implementation of based-risk surveillance and risk assessment for the swine production, 7. development of monitoring and control population protocols, 8. building of a tissue bank, and 9. development of communication plan. Dynamics population studies will be made in the risk-areas, generating feedback information for management-oriented control population as well as surveillance actions.

Key-words: wild pigs, surveillance, control, epidemiology

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Introduction

Sus scrofa is considered one of the 100 worst invasive alien species in the world. The wild boar (*Sus scrofa scrofa*) and its hybrids are exotic to the Brazilian fauna, present in many states, and spreading as a devastating invasive population. It can act as reservoirs of several pathogens that affect domestic animals, wild species as well as human population. Although surveillance for Classical Swine Fever (CSF) and other important diseases should include wild pig population (Figure 1), there is no information on health status of this species in Brazil, which represents a threat to domestic livestock and international trade.

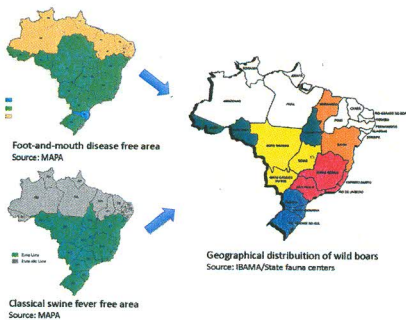


Figure 1: Foot-and-mouth disease and classical swine fever free areas and geographical distribution of free range wild boars (*Sus scrofa scrofa* and its hybrids) in Brazil.

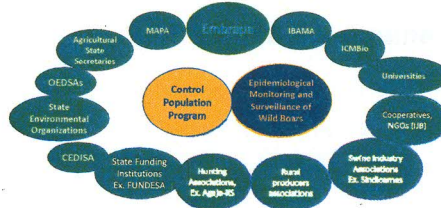
Wild boar threatening:

High prolificity without population control (1), negative environmental impact (2), destruction of corn fields (3), cohabitation and predation of domestic species (4 e 5), and sanitary risks to the swine production system (6).



Objectives

The objective of this proposal is to structure the epidemiological surveillance and control population program of wild boar in the CSF-free area in Brazil. For that, a network of various governmental and non-governmental organizations were mobilized to act synergistically.



Project's proposals:

1. Stimulation of elaboration of legal support for wild boar population management;
2. Elaboration of guidelines for wild boar tissue sampling, epidemiological surveillance and contingency plans;
3. Training of hunting organizations in effective field sanitation practices;
4. Characterization of the distribution of the wild boar population;
5. Development of geographic information system;
6. Implementation of based-risk surveillance and risk assessment for the swine production system;
7. Development of monitoring and control population protocols;
8. Building of a tissue bank;
9. Development of communication plan of management and surveillance program.



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