



HAL
open science

Trichinella in Corsica Island: when the parasite takes advantage of the slightest weak link

Isabelle Vallée, Michèle Riera, Céline Richomme, Sandrine Lacour, Gina Zanella, François Casabianca, Pascal Boireau

► **To cite this version:**

Isabelle Vallée, Michèle Riera, Céline Richomme, Sandrine Lacour, Gina Zanella, et al.. Trichinella in Corsica Island: when the parasite takes advantage of the slightest weak link. 14th International conference on Trichinellosis, Sep 2015, Berlin, Germany. hal-02740385

HAL Id: hal-02740385

<https://hal.inrae.fr/hal-02740385>

Submitted on 2 Jun 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

***Trichinella* in Corsica Island: when the parasite takes advantage of the slightest weak link**

Isabelle Vallee¹, Michele Riera², Céline Richomme³, Sandrine Lacour¹, Gina Zanella⁴, François Casabianca⁵, Pascal Boireau¹

¹ANSES, ENVA, INRA, Université Paris–Est, JRU BIPAR, Laboratory for Animal Health, Maisons–Alfort, France; ²Laboratoire Départemental d'Analyses, Ajaccio, France; ³ANSES, Nancy laboratory for rabies and wildlife, Malzéville, France; ⁴Université Paris–Est, ANSES, Laboratory for Animal Health, Epidemiology Unit, Maisons–Alfort, France; ⁵INRA, Corte, France

E–Mail of corresponding author: isabelle.vallee@ANSES.fr

Trichinella britovi emerged in the Taravo valley in South–Corsica in 2004 prior to which the Mediterranean island was considered as *Trichinella*–free. The parasite was detected during official inspection at the slaughterhouse in farms with traditional free ranging pigs for manufacturing delicatessen. Two pigs were identified at the slaughterhouse in March 2004, followed by 8 pigs in November.

Epidemiological studies conducted on foxes allowed the detection of a positive animal in the same valley among 74 foxes of the Island. Interestingly no wild boars were found positive during studies performed from 2006 to 2008 among 1881 animals controlled by direct tests. However, serological analysis carried on muscles fluid showed that 2 % of 1492 wild boars were seropositive (95 % CI: 1.4–2.9) showing an exposition to the parasite and thus the circulation at low level of *Trichinella* within Corsican wildlife. These results were strengthened by a serological study of farmers' dogs in Taravo (n=645) and several other valleys, revealing a seropositivity of 3 % (95 % CI: 1.9–4.8).

Due to reliable analysis performed by the accredited local routine veterinary laboratory, other positive out–door pigs were successfully detected at the slaughterhouse in 2010 (n=3), in 2011 (n=4), 2012 (n=6) and 2013 (n=2) in the Taravo valley and another valley of South– Corsica. Moreover, local people are traditionally used to eat pork meat products well cooked, thus limiting the risk of human contamination in case of uncontrolled meat. Unfortunately, in April 2015 human trichinellosis was reported in continental South–France due to the consumption of raw Corsican figatelli bought via the internet.

So what happened? The sanitary investigation allowed the identification of the manufacturer, native to a village of Alta–Rocca, an area near the Taravo valley. This on–farm processor had built his business on the manufacturing of traditional saltings. Although he lives in an endemic area for pig trichinellosis identified as such since 11 years, he did not sent a part of his pigs to the slaughterhouse and so the pigs were not controlled, especially in February. This punctual lack of official control associated with bad information of the non–local customers caused a weakness in the control of the parasite, which took advantage of these circumstances.