## CENSUS OF BRAZILIAN NATURALIZED SWINE BREEDS

## CENSO POBLACIONAL DE CERDOS AUTÓCTONOS DEL BRASIL

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### **ADDITIONAL KEYWORDS**

### PALABRAS CLAVE ADICIONALES

Swine. Native breed. Conservation. Census.

Cerdos, Razas autóctonas, Conservación, Censo,

# **SUMMARY**

Aiming to survey the swine breeds/types found in the Federal District (DF), Embrapa Genetic Resources and Biotechnology and Emater-DF signed in 1999 an agreement with the purpose of carrying out a census in the DF region (Central part of Brazil) as well as pointing out to professionals and farmers the importance of their conservation. A total of 44 questionnaires were distributed and 253 animals were identified in 26 farms. The most frequent type was Piau (n=119) followed by Nilo (n=85) with Pirapetinga (n=15) and Caruncho (n=12) in smaller numbers. A type known as Cuié (n=10) was observed, a dark skinned pig with few hairs and small spoon shaped ears, and another type of small size and short legs locally known as Bassê (n=12) . The results obtained started some actions at the producer level. A list is being organized, of people interested in naturalized swine breeds conservation as well as people interested in breeding them for commercial purposes. As a consequence, a production system for naturalized pigs is being put together by Embrapa and Emater-DF. The naturalized pig population survey in the DF is part of the general survey to be conducted in all Brazil.

All actions taken in the course of this task, as well as those presently conducted, aim at encouraging breeders to be involved in naturalized swine conservation, through increased awareness of their importance as a genetic resource.

# **RESUMEN**

Con el fin de conocer las razas/tipos de cerdos naturalizados encontrados en el Distrito Federal (DF, Góias - Brasil), la Embrapa Recursos Genéticos y Biotecnología y la Emater-DF firmaron en 1999 un convenio de cooperación con el objetivo de realizar un censo poblacional de cerdos en la zona del DF, y sensibilizar a técnicos y productores rurales sobre la importancia de la conservación de las mismas. Fueron distribuidas 44 encuestas en 26 propiedades, donde se identificaron 253 animales. El tipo más frecuente fue Piau (n=119), seguido de Nilo (n=85), en menor número fueron encontrados el Pirapetinga (n=15) y el Caruncho (n=12). Fue observado un tipo conocido como Cuié (n=10) de piel negra, cerdas escasas y orejas muy pequeñas en forma de

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cuchara, y otro tipo de porte pequeño, patas cortas, localmente conocido como Bassê (n=12). Los resultados obtenidos desencadenaron acciones frente a los ganaderos. Está siendo creado un archivo de aquéllos sensibilizados con la conservación de cerdos naturalizados, así como de los interesados en cría con fines comerciales. Como consecuencia está siendo elaborado por parte de la Emater-DF y la Embrapa un sistema de producción para cerdos naturalizados. El censo de la población de cerdos naturalizados en el DF, es parte del un censo más grande que deberá ser realizado en todo el territorio nacional. Las acciones desarrolladas en esto trabajo tratan de estimular a los criadores a colaborar en la conservación de los cerdos naturalizados, a través de la concienciación de la importancia de éstos como recurso genético.

### INTRODUCTION

Naturalized Brazilian pigs are descendants of animals that arrived in that country mainly from Europe during the colonial period. Breeds were of Portuguese (Bizarra and Alentejana), Spanish (Galega and Perijordina), Italian (Napolitana) and Asian (Macau) origen. With later introductions of more precious breeds of higher productivity indices, aimed at meeting food demands especially in urban centers, naturalized pigs were gradually replaced. The introduction of improved breeds, the use of extensive breeding systems under which they were bred, and the custom of castrating the animals for fattening, led to crossing among them, as well as with newly introduced breeds, resulting in mixed-breed populations. Naturalizaed swine had the characteristic of producing more fat lean meat. For that reason also there was little interest in

using them in improvement programs. However in rural areas these were always the preferred animals, not only due to the large production of lard but to the peculiar taste of their meat. These animals are relatively hardy with lesser feeding and management requirements as compared with improved breeds, adapted to different ecosystems of the regions of Brazil and with a capacity for survival in unfavorable conditions. These traits make them an important genetic resource to be used in breeding programs and research, thus justifying common efforts for their conservation.

Eight naturalized Brasilian swine breeds have already been described in the literature: Canastra, Canastrão, Nilo, Piau, Caruncho, Pirapetinga, Moura and Tatu. Besides these, there exists in the State of Mato Grosso a pig called Monteiro, which has much less fat than the mentioned types.

# MATERIAL AND METHODS

In the attempt to group the diverse of naturalized Brazilian swine, four morphological descriptors were considered: (a) coat color; (b) presence or absence of bristles; (c) conformation; and (d) type of ears. The variations that occur in the conformation and ear shape are described below. On the basis of the diverse of breeds naturalized Brazilian swine were classified in eight basic standards (Principais..., 1990) as can be seen in **table I**.

In order to survey the breeds found in the Federal District (DF), Embrapa Genetic Resources and Biotechnology and Emater-DF signed in 1999 an agreement with the purpose of carrying

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**Table I.** Standards for Brasilian naturalized swine breeds. (Estándar racial de cerdos naturalizados brasileños).

	Traits				
Standard	Coat color	Bristles	Head profile	Ear type	
Canastra	Black	Fine, uniformly distributed	Sub-concave and concave	Iberian	
Canastrão	Black, read or with White spots	Dark and concentrated in the superior line of the body	Concave;	Celtic	
Caruncho	Cream with black Spots, read and White, black	Smooth, abundant uniformly distributed	Concave sub-	Asian or Iberian	
Moura	Varying from light Gray to dark gray, Generally presents a white star between the Eyes	Smooth and uniformly distributed	Rectilinear; sub-concave	Average size; lop ears; intermediate form, between Celtic and Iberian	
Nilo	Black	Absent or verythin	Sub-concave; Rectilinear	Bare, fine; Iberian	
Piau	White-cream with Black or red spots	Smooth; uniformly Distributed	Rectilinear or sub-concave	Iberian or Asian	
Pirapetinga	Black; brow	Absent	Rectilinear	Asian	
Tatu	Black	Small amount	Sub-concave	Asian	

Adapted from Principais..., 1990.

out a census in the DF region as well as pointing out to professionals and farmers the importance of their conservation. The work strategy was elaborated so that the technician, in his region-Agencies of Local Development (ADLs) at Emater-DF, identified the animals naturalized through

comments on their phenotypic characteristics. The forms were filled in accordance with the types found on the visited properties, and on the basis of this information, a second visit was carried out to gather more information of greater detail, as well as inform the producer about the conservation of

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animals threatened with extinction, the work that Embrapa Genetic Resources and Biotechnology has been developing, its importance and how these resources could benefit them.

Forty four questionnaires, in 14 of the 16 Agencies of Local Development - Emater-DF, were applied.

# **RESULTS**

On twenty six properties, 253 animals of the diverse types of natu-

ralized swine were identified. The most frequent type was Piau (n=119; 47,3 percent) followed by Nilo (n=85; 33,6 percent) with Pirapetinga (n=15; 5,9 percent) and Caruncho (n=12; 4,7 percent) in smaller numbers, as well as 454 crossbred animals (figure1). A type known as *Cuié* (n=10; 3,9 percent) was observed, a dark skinned pig with few hairs and small spoon shaped ears, and another small type with short legs, locally know as *Bassê* (n=12; 4,7 percent). **Table II** shoows the swine numbers of the diverse breeds/types,













Figure 1. Brazilian naturalized swine breeds. (Razas de cerdos naturalizados brasileños).

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*Table II. Number of naturalized Brazilian swine breeds found in the Federal District.* (Número de cerdos brasileños naturalizados encontrados en el distrito federal (DF)).

Condition Breed/Type	Adult males n (p.100)	Adult females n (p.100)	Young n (p.100)	Total n (p.100)
Nilo	24 (47.06)	36 (33.97)	25 (26.04)	85 (33.60)
Pirapetinga	01 (1.96)	08 (7.56)	06 (6.25)	15 (5.93)
Caruncho	01 (1.96)	07 (6.60)	04 (4.17)	12 (4.74)
Cuié	01 (1.96)	03 (2.82)	06 (6.25)	10 (3.95)
Bassê	02 (3.92)	02 (1.89)	08 (8.33)	12 (4.74)
TOTAL	51 (20.16)	106 (41.90)	96 (37.94)	253

Brasilian naturalized pigs.

found in the Federal District in Brazil.

The results of the survey showed the following aspects:

- (a) There are many types of swine of naturalized breeds in this region of the Federal District;
- (b) The spread of Piau is greatest, followed by Nilo type;
- (c) The production is destined, in general, for the domestic consumption of meat and, mainly, lard;
- (d) There exists great interest on part of the producers to invest in a system directed for the production of green *caipira* pigs whose demand is increasing in the region;
- (e) The results stimulated positive reations on the part of the producers.

A list is being organized, of people interested in naturalized swine breeds

conservation as well as people interested in breeding them for commercial purposes. As a consequence, a production system for naturalized pigs is being carried out together by Embrapa and Emater-DF.

# CONCLUSIONS

The naturalized pig population survey in the DF is part of general survey to be conducted in all Brazil. All actions taken in course of this task, as well as those that are being carried out, aim at encouraging breeders to be involved in naturalized swine conservation, through increased awareness of their importance as a genetic resource.

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