

# PORCINE RESEARCH

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Short Note

## Mangalitsa breed returns to homeland

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**Abstract.** Mangalitsa is a rustic breed of pigs from Carpathian Basin (based in Hungary and Romania) that are descended directly from wild boar populations. The short note is a presentation of the current state of the Mangalitsa pig farming, its origin, history and evolution.

**Key Words:** Mangalitsa, Mangalitza, *Sus scrofa ferus*, *Sus scrofa domesticus*.

**Rustic in the Real Meaning of the Word.** Mangalica (Hu), Mangalița (Ro), Mangalitsa (US) or Mangalitza (UK) is a rustic breed of pigs (red, blonde, black or wild type) from Carpathian Basin (mainly from Hungary and Romania) that are descended directly from wild boar populations. Due to its origin, the Mangalitsa pig is unusual as it has a hairy 'fleece', similar to that of a sheep (Figure 1). The only other pig breed known for having such a long hair is the Lincolnshire Curly Coat of England, now extinct (Wikipedia 2014).



Figure 1. The "wooly pig" Mangalitsa (source: Oddity Central 2014).

**Origins, History, Evolution.** There are three varieties of Mangalitsa (Figure 2). The most popular variety of the breed, the blonde Mangalitsa was developed from older hardy types of Hungarian pig (Bakonyi and Szalontai breeds) crossed with the European Wild Boar and a Serbian breed (and later others like Alföldi) in Austro-Hungary (1833) (IGWÖ – Webportal mangalitza.at). The development took place in Austro-Hungary (present day Arad county in Romania) in the early 19th century (Radnóczy 2003). The new quick-growing "fat-type" hog did not require any special care, and so became very popular in Hungary. In 1927 the National Society of Fat-Type Hog Breeders (Mangalicatenyésztők Országos Egyesülete) was established, with the objective of improving the breed.

Mangalitsa was the most prominent swine breed in the region until 1950 (there were 30,000 heads in Hungary in 1943) (Radnóczy 2003).



Figure 2. The three Mangalitsa varieties: from the left to the right, swallow-bellied, red and blonde (source: Tumblr 2014).

The Mangalitsa was formerly bred as a lard pig, and animals were large and round. Because of the drop in demand for lard, the breed's popularity has decreased for several decades (Alderson 1994).

In Romania, most of the farmers dropped this breed after the Anticommunist Revolution (1989). However, the breed was permanently improved and conserved by the Hungarian farmers (later using European Union Funds for that). They sensed the future economic potential of this breed and became among the largest exporters of Mangalitsa ham. The price of Mangalitsa ham is now more than 80 euro per kilogram, and they sell it in Western Europe, USA and Japan.

**The Present Situation in Romania.** In the last few years, Romanian farmers recovered the time lost and repopulated their farms with Mangalitsa. They recently established the Mangalitsa Pig Breeders Association (Asociația Crescătorilor de Porci Mangalița). However, their production hardly ever satisfied the national market requests. The price of Mangalitsa pork in Romania is about 40-50 RON per kilogram. In order to sell better their production, the Romanian farmers created their own traditional products/trademarks such as Sausages Săpânța. There is a Festival Mangalitsa, held at Baia Mare in April of each year.

**Mangalitsa Spreads to West.** Although Mangalitsa is now regarded as a rare breed or hobby (Alderson 1994), it was imported by many countries all over the world.

In March 2006, 17 Mangalitsa were imported from Austria into the UK. These are registered with the British Pig Association (BPA) and the pedigrees are being maintained on the BPA Mangalitsa Herd Book. Three of the animals were sent later to the Tropical Wings zoo in Essex (BBC News 2010).

In 2007, Woolly Pigs, an American company, imported a herd of 24 Swallow-belly Mangalitsa gilts and boars to the USA (the Swallow-bellied Mangalitsa breed was produced by crossing the blonde Mangalitsa and the black variety, which has gone extinct).

In 2010, Pure Mangalitsa, based in Michigan, imported the first Blonde Mangalitsa pigs into the United States (Pure Mangalitsa 2010).

**Quality Instead of Quantity.** Mangalitsa is not suitable for super intensive farming but for small farms of less than one hundred of heads and extensive farming. The breed is slow growing, hardy, while its meat is low in cholesterol but very expensive (Petrović et al 2010; Nistor et al 2012).

The recent observation of Romanian populations of Mangalitsa showed a prolificacy of 6-7 piglets, a specific consumption of 5.5-6 kilograms of food and an average daily gain of 400 grams (Agrointel.ro 2013).

In two experiments conducted in Hungary by Holló et al (2003), the meat and fat quality as well the fatty acid composition of 22 Mangalitsa pigs (barrow) were examined. Compared to the German Saddleback, which is considered also fatty, and the German

Landrace, it was found out that the meat of the Mangalitsa had a darker colour, its fat was whiter and the intramuscular fat content of meat and thickness of back fat was considerably higher. The high intramuscular fat content and its fine, equal dispersion is favourable from the point of view of palatability (flavour, juiciness, tenderness) and is of excellent steak quality overall. The lower saturated fatty acid content and higher unsaturated fatty acid proportion is advantageous from a human- nutrition point of view. For this reason, in Romania, Mangalitsa pig is called "the olive on four legs" or "the salmon pig". Because of the linoleic and linolenic acid ratio the oxidation capacity is lower, which declines the chance of rancidity. The same authors (Holló et al 2003) found that the slaughter at smaller weight (between 90 and 115 kg) reduced the fat content of meat and had a significant effect on the protein content of loin and ham, as well as the fatty acid composition. Finally, they concluded that the Mangalitsa hogs had higher meat quality traits, and exploiting these advantages special or traditional products of high quality can be produced (Holló et al 2003).

**Final Remarks.** "Re-discovery of Mangalitsa pork" is a good sign for domestic animals diversity. It is important for the conservation of the breed that not only the old homeland of the breed (Transylvania and Banat) was repopulated, but also the breed was spread to the west in UK and USA.

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