

FREE-RANGE ORGANIC BREEDING SYSTEM

CASE STUDY FARM_IT_03

History farm

The farm_IT_03 is in Southern Tuscany, characterized by a Mediterranean climate with relatively cold to moderate winters and warm summers. This farm is certified organic and managed by the farmer together with about 20 employees. Covering an area of 460 hectares, of which 300 hectares are owned woodland, the farm carries out various activities.



The farm breeds a typical Tuscan pig breed, the Cinta Senese, which is well adapted to free-range practices. It raises about 10 sows and 80 fattening pigs annually for internal consumption.

Additionally to pig breeding, the farm also cultivates olive groves, vineyards and vegetable gardens.

Pig rearing

Every year, the farm slaughters approximately 80 fattening pigs, which reach a weight of 130 kg or more and are around 16 months old at the time of slaughter. These pigs are raised from 10 sows, resulting in an additional 80 young pigs in between.

During the farrowing and suckling period, the sows are given special attention. A few days before farrowing, each sow is placed alone in a paddock with a hut. Weaning begins about one month after farrowing, with the sow being separated from the piglets during the day and reunited with them at night. After another month, the sow is reintroduced to the boar, and the piglets are joined with the others. This management strategy is employed to prevent issues such as piglet diarrhea and to facilitate sow insemination.

Post-weaning, the piglets and sow are separated, typically after a few days. To ensure the well-being of the pigs and minimize environmental impact, they are moved to different pastures during their growing and finishing stages, thus avoiding damage to the forest.

The pigs are slaughtered when they reach a live weight of approximately 130 kg or more, typically at around 16 months of age.



Pasture menage

Pigs are mainly reared in the forest, using open pastures or clearings. The pigs are housed in huts that provide shelter and protection. The farm does not manage the pasture before or during the occupation of the pigs, but monitors and assesses any damage.

Grazing management follows a forest rotation system. The forest environment offers natural shelter against cold and heat stress and provides food in the form of acorns and other fruits. The animals are moved every few months, usually when bare ground is observed, which indicates the exhaustion of the forest litter.

The pigs' food requirements are supplemented with cereal and legume meal, with 2 kg per day per pig. In autumn, when acorns are abundant, and in spring, when grass is available, the portion of meal can be reduced to 1 kg per day. The reduction in meal intake can be up to

about 50% during these seasons. Feeding regimes are not related to the age of the pigs, but to seasonal variations.

Some tests were carried out with cultivated pastures, but they were damaged by the animals and did not form a robust sward. Natural pastures, on the other hand, are more productive and hardy. The soil has also benefited, the grass grows much better and is never bare.

Environmental aspects

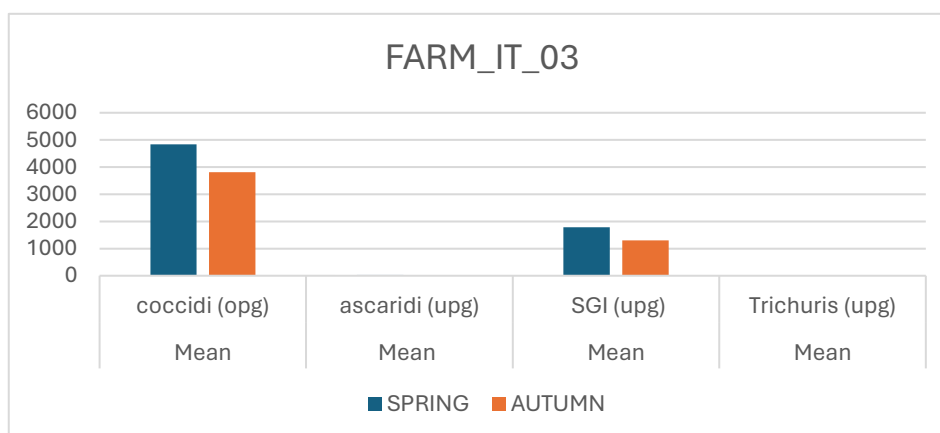
A high level of health and welfare is observed on the farm, the animals are free to express their behaviour. This is expressed in the meat, which is very tasty.



Economic aspects

While recognizing that the costs are significant, the farm is able to sustain its business by selling the meat directly in the butcher's shop or by using it in the restaurant. This strategy is sufficiently remunerative to cover the expenses. Direct sales, together with the restaurant, are the main markets for their pork products.

Parasities

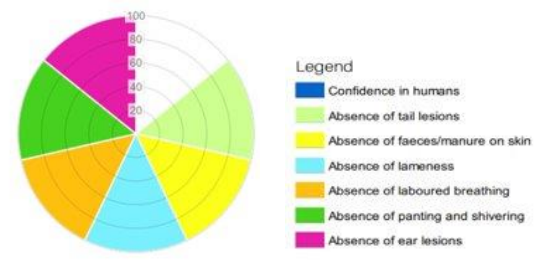


Faecal samples collected in 2022/2023 indicate seasonal fluctuations in the presence of intestinal parasites, in particular Coccidi and Strongyles. In particular, the Coccidae are

numerically high, but do not reach values that compromise the health of the animal, which is in excellent condition.

PIG LOW and welfare

Pig welfare is monitored regularly, including seasonal fecal sampling for parasite analysis. The PIGLOW application is utilized for assessing animal welfare, with parameters generally showing high scores except for trust towards humans, which improves over time as pigs become more familiar with human presence.



The graph illustrates the different parameters used to evaluate animal welfare in pig farming. High scores are evident for most of the parameters, except for one: trust towards humans. The pig, which is very inquisitive by nature, requires a certain amount of time to get close to humans. However, in this particular case, the animals did not seem frightened. After a few minutes of studying the situation, they showed increasing interest in humans, approaching them with curiosity.

Overall, the farm's approach combines sustainable practices with a focus on animal welfare and product quality, while having to confront challenges such as soil erosion and feed management.

TABLE FARM_IT_03

Free-range production system - FARM_IT_03	
Farm category	Organic
Number of sows	10 sows
Breed	Cinta Senese
Food	Pasture and integration with cereal and legumen meal
Average farrowings per sow	
Farrowings per year	
% live born piglet mortality	
Mutilations	None
General health	The animals are in excellent health.
Weaning	After 60 days
Weight when sold on or slaughtered	Aapprox. at 130 kg or more life weight, 16 months old.