Acorns for fattening free-range pigs

**Problem**

Montanera is a traditional feeding system where pigs forage for acorns. Iberian pigs foraging for acorns during their finishing phase has economically contributed to conserving the “dehesa”, a high nature value (HNV) farmland based on agroforestry, currently consisting of more than four million hectares in the southwest of the Iberian Peninsula (photo 2).

**Solution**

This natural resource is used to fatten pigs without any kind of compound or supplementary feed. During the last 2-3 months of fattening, pigs can gain more than 40 kg of body weight from grass and foraged acorns.

**Benefits**

In the montanera system, the mean average daily gain for fattening pigs is ≥0.75 kg/day. Their body fat has a high concentration of oleic acid (around 55%) and very low concentrations of linoleic and palmitic acids; which is very important for the quality of pork and the cured products.

**Practical recommendation**

- The fattening performance is very much influenced by the age of pigs and their compensatory growth; hence, pigs should be as old as possible (≥1 year) and adapted to grazing.
- Grass is necessary as a source of protein to compensate for the low protein levels in acorns.
- The food conversion rate is 10.5 kg of whole acorns of Q. i. rotundifolia to gain 1 kg, besides the contribution of grass; to establish the stocking rate, consider that an adult evergreen oak produces ≈11 kg of acorns/year.
- Iberian pigs peel acorns to avoid the high content of tannins in the shell. However, during peeling, approximately 20% of the kernel can be wasted.

**Applicability box**

**Theme**
Pigs, feeding and ration planning

**Context**
South West of Iberian Peninsula; partly adaptable to other Mediterranean areas and forests with Quercus species (the best species is Q. ilex rotundifolia).

**Application time**
Autumn and winter.

**Required time**
None if there are adult trees; approximately 15 years to have the first mast of acorns if it is necessary to establish trees and the surface is certified as organic.

**Period of impact**
1.5 months to influence meat quality and fatty acid profile

**Equipment**
None for free grazing; only a stick to knock down acorns if there is a swineherd with the pigs.

**Best in**
Fattening pigs (especially in fatty breeds)

**Photo 1:** Pig foraging acorns (Vicente Rodríguez-Estévez, University of Córdoba)

**Photo 2:** Group of Iberian pig fatteners grazing in a dehesa estate (Vicente Rodríguez-Estévez, University of Córdoba)
Further information

Video

- The video “Cerdos Comiendo Bellotas en la Dehesa” shows a swineherd knocking down acorns.
- The video “Cerdos ibéricos comiendo bellotas en una dehesa de Extremadura” shows a herd of Iberian pigs foraging acorns.

Further reading


Weblinks

- Further documents can be found on the Organic Farm Knowledge website.

About this practice abstract and OK-Net EcoFeed

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