

Diversified organic pork production

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Development in organic pig production in Denmark



Year	Sows	Slaughter pigs
1990	300	5,000
1995	1,100	12,000
1998	3,800	70,000
2000	3,300	64,000
2002	4,000	74,000
2005	3,200	61,000
2006	3,300	57,000

Plantedirektoratet, 2006

Relative organic pork production and consumption in Denmark



	Production, mill. kg	Share of production, %	Share of consumption, %
Milk	401	8.7	26.2
Pork	6	0.2	0.5
Eggs	7	13.5	15.5

Possible reasons for the low market share



- Heavy price competition with pork products produced conventionally
- Little objective quality differences compared with conventional products
- “Heavy” pork consumers less interest in (paying premium prices for) organic products than other consumer segments

Compromises in present production



- Animal welfare (e.g. environments that restrict the animals possibility of performing natural behaviour)
- Use of specialised genotypes – not necessarily well-suited for outdoor condition nor of particular gastronomic quality
- No consideration of the function of the pig in the agro-system

A call for new ways of production



- Pigs integrated in the crop production
 - Soil preparation, foraging (reduction in production costs and N-surplus)
- Improved possibility to perform natural behaviour
 - No ringing
 - No castration
 - Season production (no farrowings during extreme hot or cold weather)
 - Use of traditional breeds more suited for outdoor production
- Superior pork quality/different appearance
 - Use of traditional breeds
 - Production of different "types" of slaughter pigs

An upcoming project

■ Overall objective

To identify strategies for a diversified organic pork production with superior sensory quality characteristics based on pigs foraging in the cropping system

■ Specific objectives

To investigate how the performance and meat quality of different "types" of slaughter pigs are affected by breed. The following three categories will be investigated:

- Entire male pigs slaughtered before sexual maturity
- Female pigs slaughtered at more than 100 kg live weight
- Sows slaughtered after weaning of first litter

Breed combinations

- (Landrace x Yorkshire) x Duroc (modern crossbred)
- Danish Black-Spotted (traditional breed)
- Danish Black-Spotted x Duroc



Why the Danish Black-Spotted



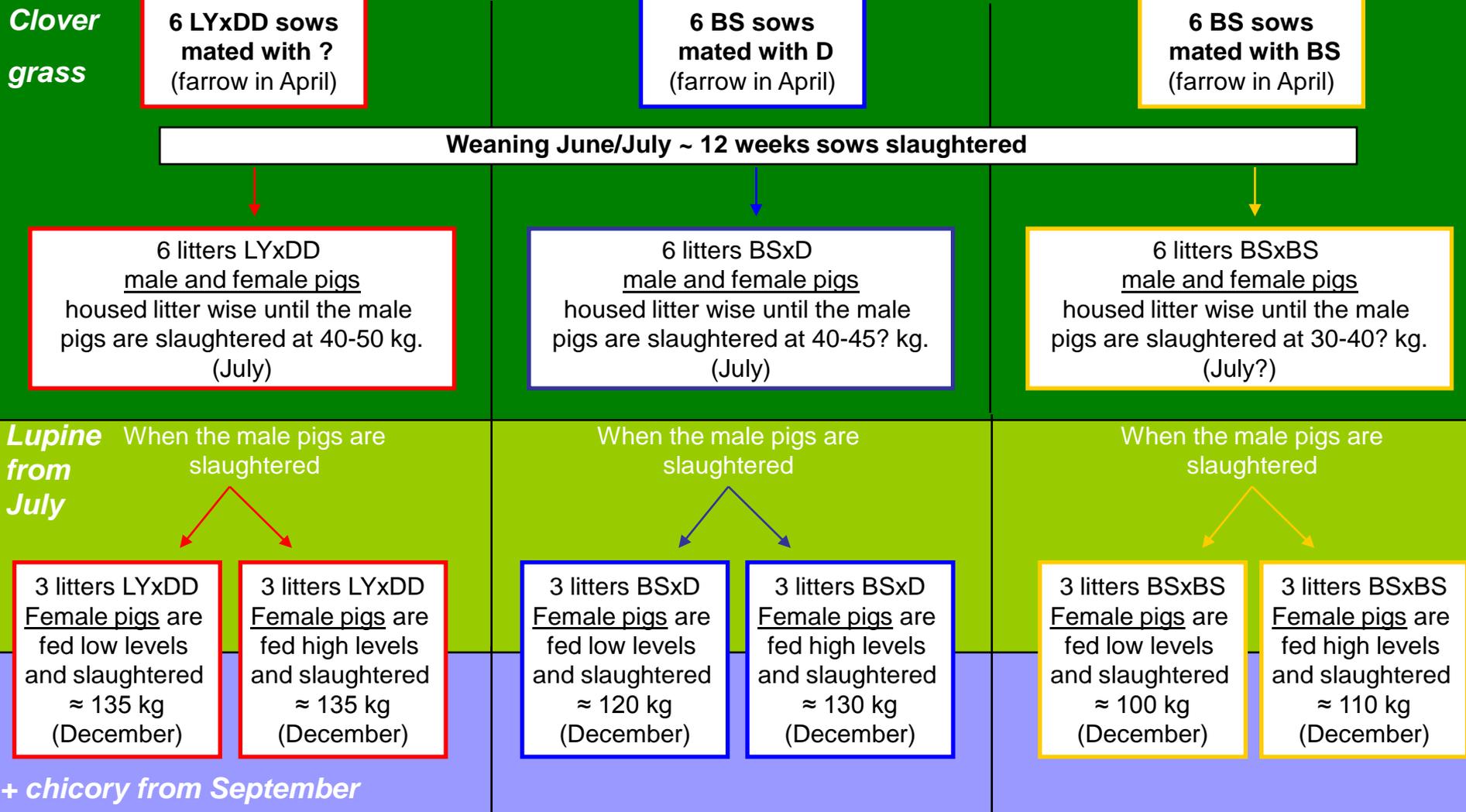
- Signals 'naturalness' and 'otherness'
- The meat described as darker, more tasty compared to the high-producing breeds
- Better suitable for an 'organic life' outdoor
 - Improved mother abilities?
 - Improved roughage utilisation?

Experiences with the Danish Black Spotted so far



Lidt generelt om faringsforløb, antal fødte grise....

Experimental set-up



Assessment for each genotype



- Growth
- Feed conversion ratio
- Forage intake and utilisation
- Meat quality (small male pig, larger female slaughter pig, sows)
 - Sensory profile (flavour, odour, tenderness)
 - New "products"/cuttings from small male pigs
 - Carcass yield of larger female pigs

Conclusion

- There is a need to rethink the organic pig production – to diversify from conventional production – in production logic and in product quality
- Whether the ideas proposed in this project are valid or not remains to be proven
- A dilemma may exist in the interests of new farmers – interested in and having competences in pig production OR organic production.
- Project progress: see project homepage: www.qemp.elr.dk/uk