

Producing organic beef on grass-based diet with suckler herd

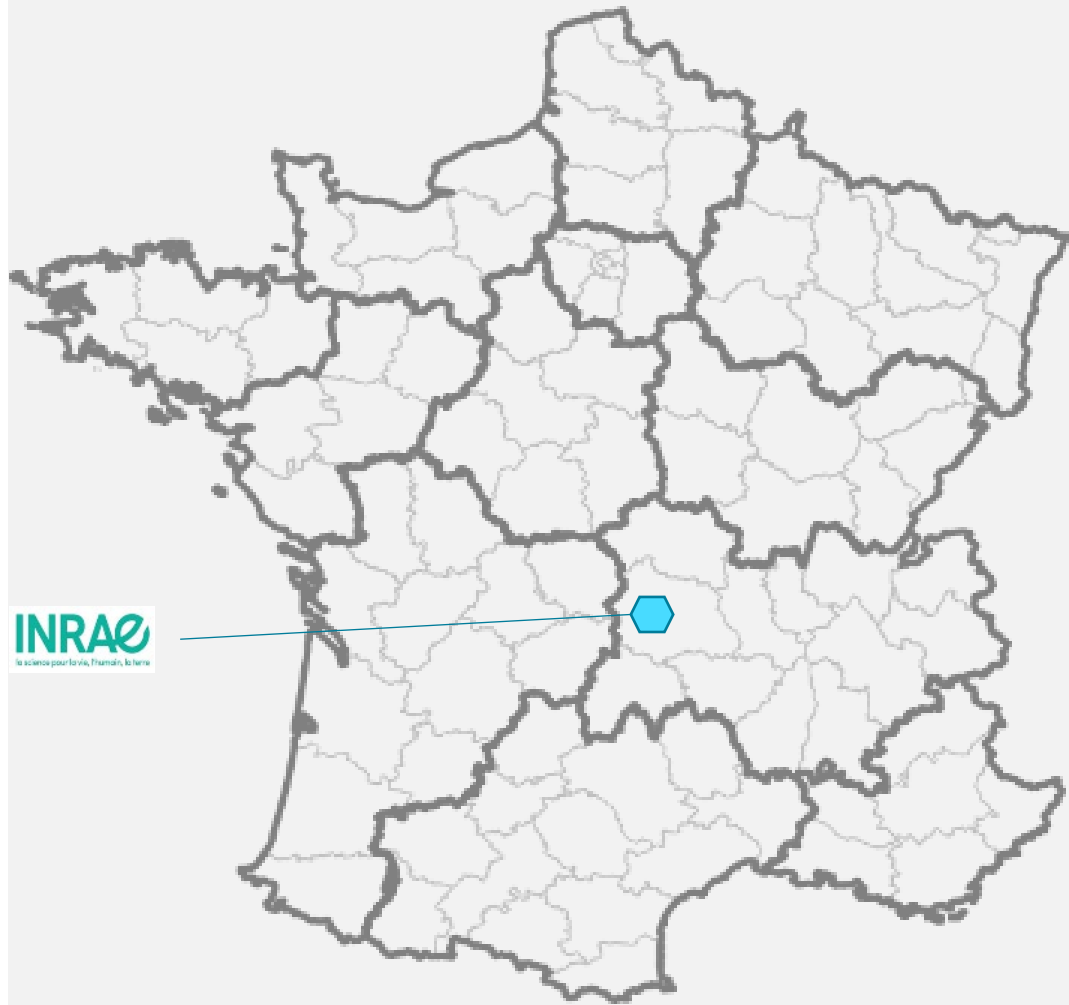
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Production **itineraries** for organic male cattle



Objectives

- To position mountain suckler cattle in organic beef production
- To promote organic suckler beef production by proposing production itineraries for young males
- To offer one or more types of organic finished males in line with demand from the catering and consumer markets
- Study methods of finishing males that make the most of the farm's resources (grass).

Grass at the heart of finishing systems for male organic suckler cattle to satisfy tomorrow's markets

More than 1 in 2 males from organic suckler farms leave the organic sector
In organic farming, half of the male animals slaughtered to produce young meat



Crossbreeding with an early breed (Angus) to produce young grass-fed meat (Bouvibio)

Between veal and beef, the Bouvibio product is a young male beef cattle from a suckling breed raised mainly on grass in compliance with AB specifications, aged 8 to 14 months, produced and marketed locally for Collective Catering

Production schedule

Salers x Angus crossbred calves, born in January, slaughtered at 11.5 months

Live weight : 480 kg

Average daily growth: 1250 g/d



J	F	M	A	M	J	J	A	S	O	N	D
Milk + grass									Wrapping silage + Triticale + Pea		

Carcass yield: 57%
272 kg – R= (2+, 3-)



Calendar

- Duration: 2 years January 2021 to February 2023
- 27 males including 13 castrated (C)

Experimental design

Events	Period
Calving	Between December 25 and March 1
Castration of half of the calves	<2 months after birth
Grassing	The earliest possible 2nd half of April
Reproduction	End of March to end of June
Weaning and re-entry into the barn	Early October (9 months old calves)
Fattening	From weaning to one year of age
Slaughter	12 months old, weight and body condition score will be a result

Food values

	DM (%)	CP (g/kg DM)	NDF	UEB (/kg DM)	UFV (/kg DM)	PDI (g/kg DM)
Grass wrapping	72	178	451	0,92	0,86	102
Concentrate (75% triticale, 25% pea)	89	145	150		1,2	88
Diet	76	169	362	0,85	0,93	97

- ✓ A very good quality forage harvested early which allows the animals to fatten
- ✓ A maximum of 35% of feed concentrate in the diet

Feed intake



Suckling period

Only grass and milk

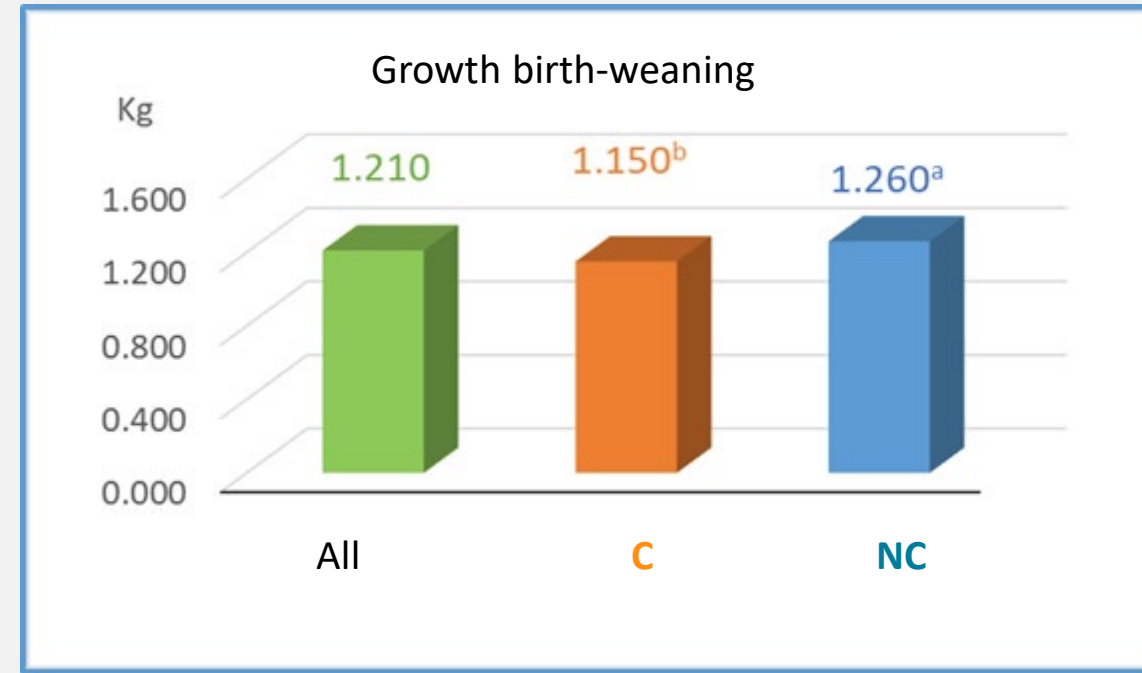
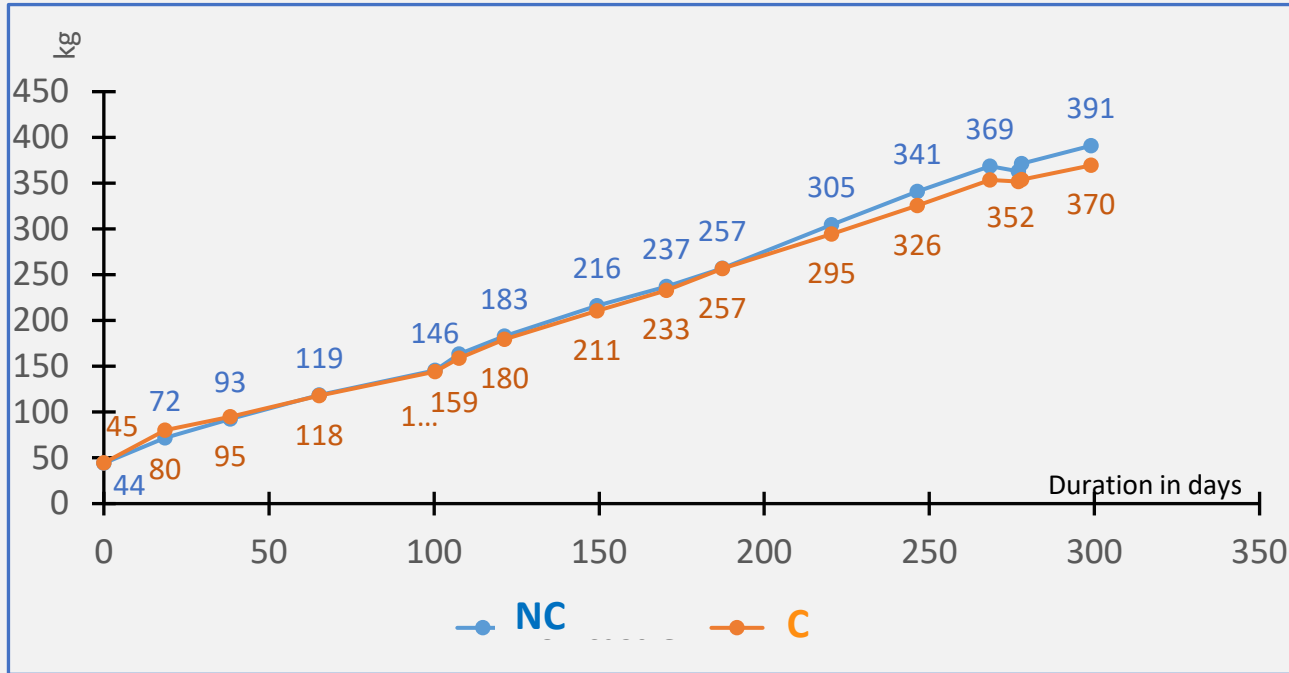


Fattening period :

- Dry matter intakes between 7 and 9kg/animal/day
- Concentrate intake for the mother-calf pair from birth to slaughter : ± 250 kg.

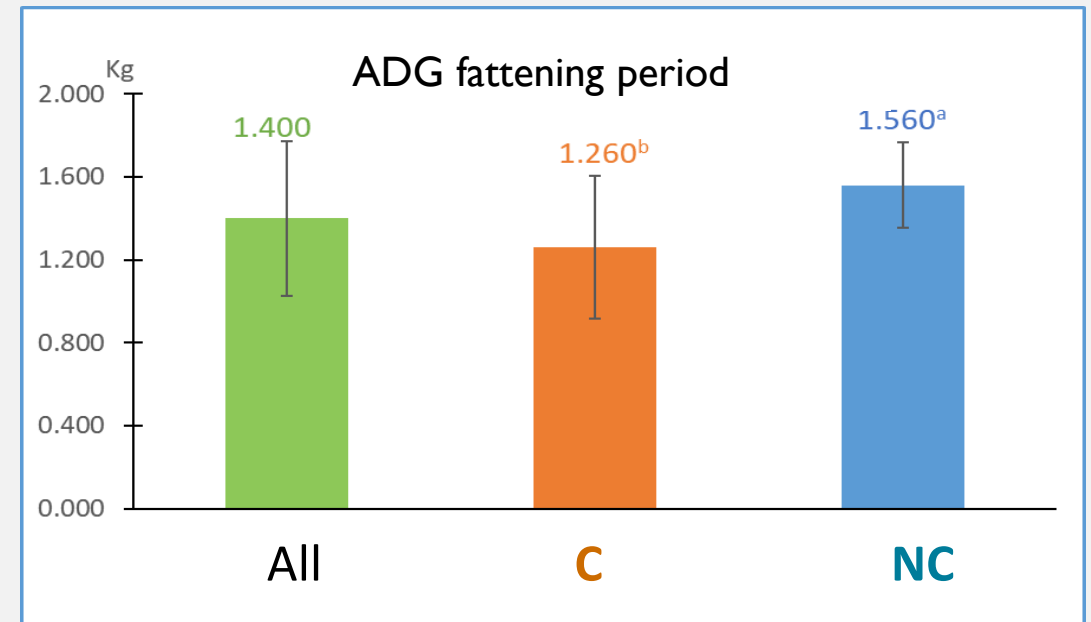
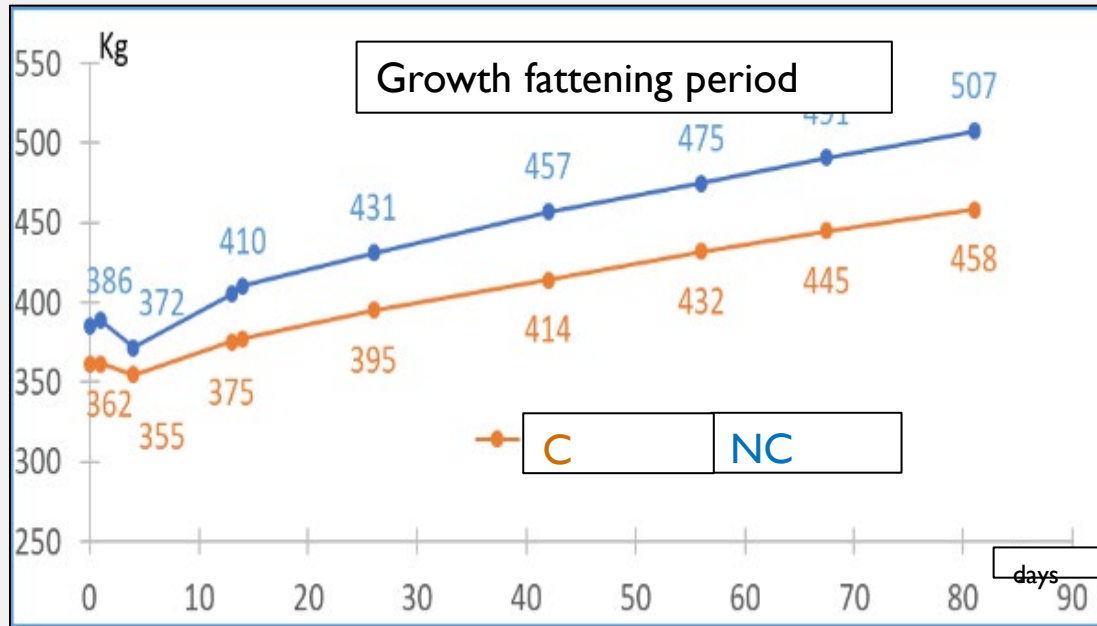
Ingestion	Kg DMI per day
Wrapped hay	5.8 kg /d
Triticale + Pea	2.9 kg /d
Dry Matter intake	8.7 kg /d
Total concentrate ingested mother-calf pair	250 kg

Growth birth-weaning



- ✓ Sustained birth-weaning growth of calves during suckling period (ADG > 1,200 kg)
- ✓ Only with grass and mother's milk, calves received no concentrate

Growth fattening period



- ✓ A good fattening growth (ADG $\pm$ 1.380 kg) with a significant difference of 300 g in favour of uncastrated (NC)/castrated (C).

Slaughter results

Breed	Lot	Age (j)	Fattening duration (d)	Conformation (EUROP)	BCS	Carcass weight (kg)	Carcass yield	Fat cover (kg)	Total fat (kg)
Sa X Ang	Castrated	353	82	R-	3-	250 ^b	56	3.7 ^a	18,9 ^a
SA X Ang	Non Castrated	357	82	R=	2=	285 ^a	57	2.0 ^b	13,9 ^b

- ✓ Light red meat color
- ✓ Pale yellow fat
- ✓ Heavier carcasses for uncastrated animals
- ✓ Fat cover > castrated
- ✓ Total fat > castrated
- ✓ Little marbling



Conclusion

✓ Yes, it is possible to finish young animals in organic with grassland diets to maximize the weight of the carcasses

Interesting production indicators

Feed food competition

2

Proportion of human-edible protein in the ration



Net Protein Efficiency

2.5

Share of protein produced for consumption / Share of protein that can be consumed or not by humans in the ration

Proportion of grass in the ration

> 80%

65 % in fattening period

Technical recommendations



Birth weaning without concentrate

- Combination of good milk production from mothers and very good quality pasture



A very high quality forage for fattening

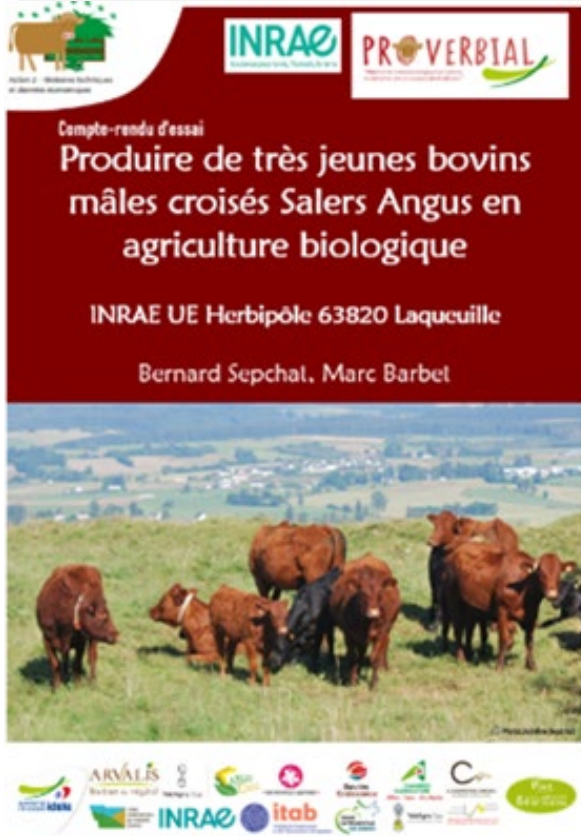
- Reducing the consumption of concentrates (feed-food competition)
- Ensure good performance (ingestion capacity)
- Work on the quality of the harvested fodder to look for energy and protein (stage and technique of harvesting, overseeding, etc.)



Grass-fed 250 to 280 kg carcasses

- Use crossbred early genetic types
- Castration effect with lower weights but more fat

Yes, it is possible to finish young animals in organic with grassland diets to maximize the weight of the carcasses



- This production meets societal demand and environmental sustainability
- The use of grass and forage in finishing diets is an alternative to the production of grazers in mountain areas.
- But it requires reflection by the sector (carcass weight, production route, precocity of breeds, quality payment of the animals produced).



Thank you for your attention

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