

CARCASS AND MEAT QUALITY FROM YEARLING BULLS MANAGED UNDER ORGANIC OR CONVENTIONAL SYSTEMS



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INTRODUCTION



**HIGH QUALITY FOOD
BENEFITS FOR HUMAN HEALTH
ENVIRONMENT PROTECTION
BIOLOGICAL DIVERSITY
ANIMAL WELFARE**

EXPERIMENTAL DESIGN

OBJECTIVE

**TO COMPARE CARCASS AND MEAT QUALITY FROM
YEARLING BULLS REARED UNDER**

ORGANIC



CONVENTIONAL



PASTURE + CONCENTRATE (40%)

CONCENTRATE MEAL + BARLEY STRAW

CARCASS QUALITY



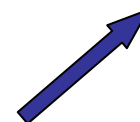
**NO INTERACTION
FEEDING SYSTEM x YEAR**

	EFFECT OF FEEDING SYSTEM		
	Organic	Conventional	Sign.
Slaughtering weight (kg)	580.2	626.3	(0.064)
Carcass cold weight (kg)	327.9	351.2	NS
Conformation score (1-15)	9.4	9.0	NS
Fatness score (1-15)	2.6	5.4	***
Carcass dissection (6th rib):			
% muscle	77.5	72.9	**
% fat	7.4	11.9	***
% bone	14.0	14.0	NS

CARCASS QUALITY



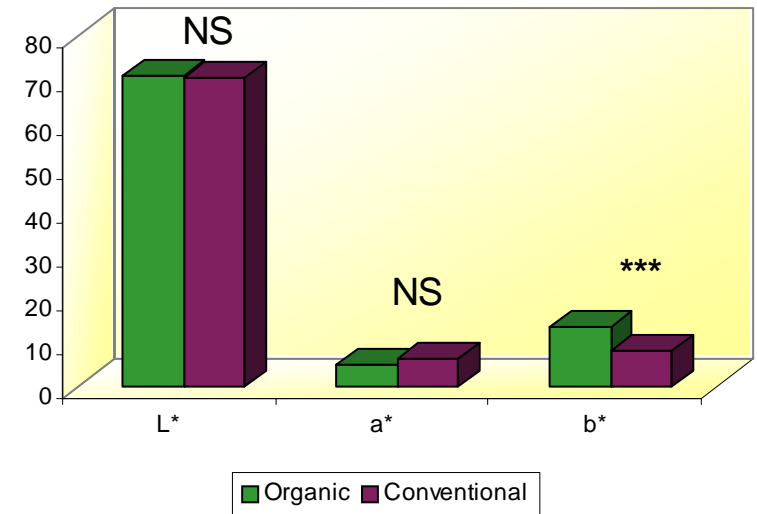
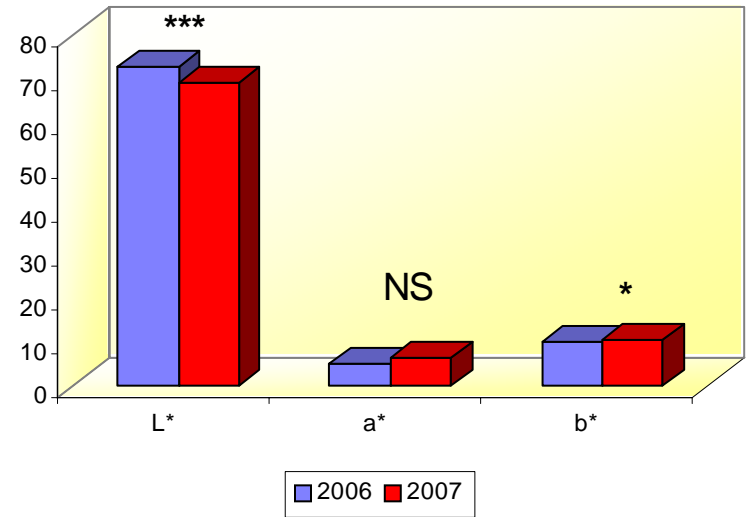
	EFFECT OF YEAR		
	2006	2007	Sign.
Age (days)	588	623	(0.051)
LW gains (kg/day)	1.03	1.26	NS



	EFFECT OF YEAR		
	2006	2007	Sign.
Slaughtering weight (kg)	553.9	649.4	***
Carcass cold weight (kg)	309.1	367.2	***
Conformation score (1-15)	8.9	9.4	NS
Fatness score (1-15)	3.7	4.6	NS
Carcass dissection (6 th rib):			
% muscle	75.2	74.5	NS
% fat	9.3	10.6	NS
% bone	14.3	13.8	NS

CARCASS QUALITY

FAT COLOUR



MEAT QUALITY



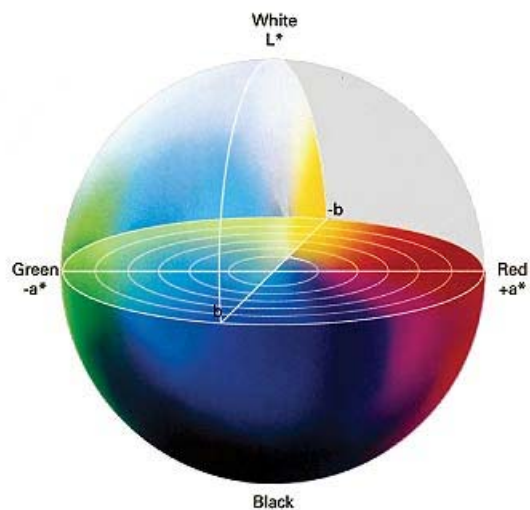
EFFECT OF FEEDING SYSTEM			
	Organic	Conventional	Sign.
Slaughter weight (kg)	580	626	(0.064)
LW gains (kg/day)	0.98	1.31	*



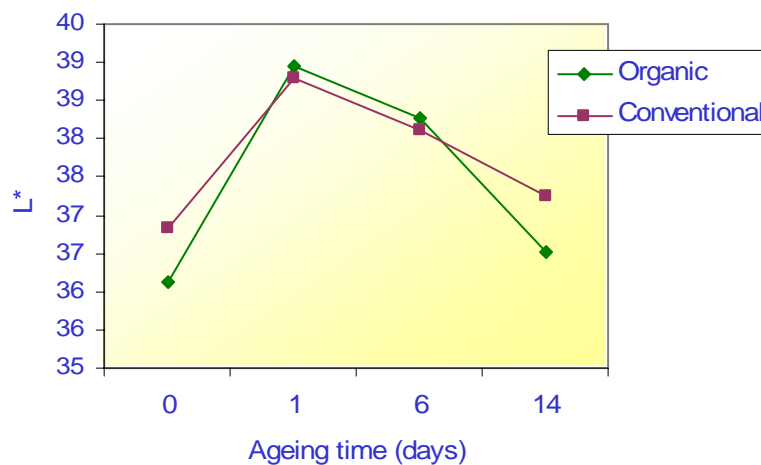
EFFECT OF FEEDING SYSTEM			
	Organic	Conventional	Sign.
Moisture (%)	75.1	74.3	***
Intramuscular fat (%)	1.4	2.5	***
Protein (%)	22.5	22.1	***
Myoglobin (mg/kg)	4.5	5.3	***

MEAT QUALITY

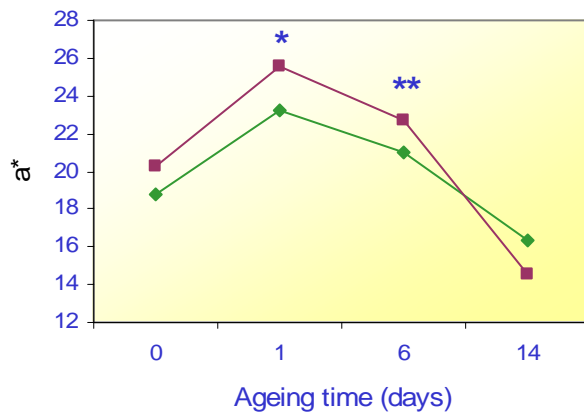
EVOLUTION OF MEAT COLOUR ALONG AGEING (MUSCLE CUTTING - 14 DAYS)



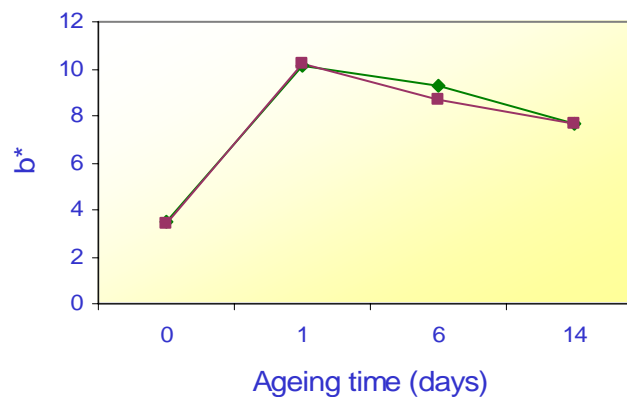
LIGHTNESS



REDNESS



YELOWNESS



MEAT QUALITY

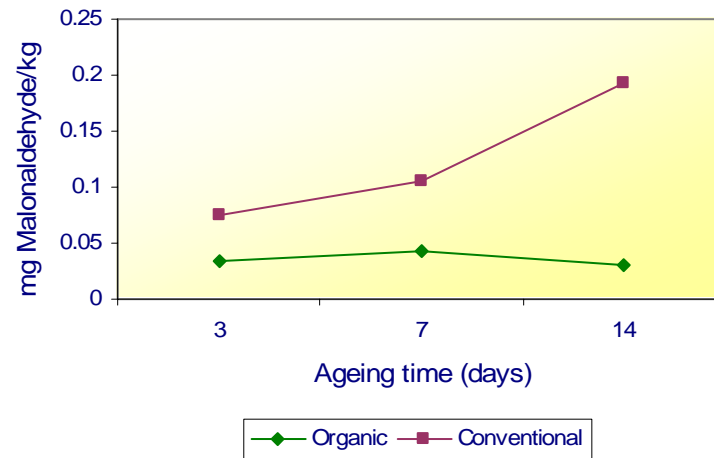
OXIDATIVE STABILITY



TBARS INDEX



TBARS INDEX



CONCLUSIONS:



UNDER THIS MANAGEMENT CONDITIONS:

Organic system produces leaner carcasses

Carcass fat from organic production is more yellow

Organic meat has lower intramuscular fat content

Organic meat shows higher stability against lipid oxidation

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THANK YOU VERY MUCH FOR YOUR ATTENTION

