Lamb meat production capacities of Croatian autochthonous sheep

breeds

Ivan Vnučec, Boro Mioč, Vesna Pavić

INTRODUCTION

- sheep population in Croatia: 600 000 heads
- → 60% = autochthonous sheep breeds
- extensive production systems





INTRODUCTION

9 autochthonous breeds:

- Dalmatian pramenka (200 000)

- Lika pramenka (30 000)
- Tsigai (3 500)
- Istrian sheep (2 000)
- Krk sheep (15 000)
- Cres sheep (15 000)
- Rab sheep (6 500)
- Pag sheep (30 000)
- Ruda sheep (400)



INTRODUCTION

- main production goal → lamb meat
- suckling lambs and light lambs → mostly demanded and represented on market



PREVIOUS RESEARCH

- little information about carcass traits of lambs derived from autochthonous Croatian sheep breeds are available
- the project: "Meat characteristics of Croatian sheep breeds" → Ministry of Science, Education and Sport

AIMS AND PURPOSE OF RESEARCH PROJECT

- to determine quantitative and qualitative predispositions of Croatian sheep breeds for meat production,
- to analyse slaughter and carcass traits of lambs,
- to determine chemical composition of the meat,
- standardisation, protection, promotion and popularisation of the original Croatian sheep breeds and their meat.

<u>IMPLEMENTATION OF THE PROJECT</u>

- 4 breeds included so far (Istrian, Pag and Cres sheep and Dalmatian Pramenka)
 - Istrian sheep → milk and meat (50 : 50), semi-intensive production system
 - Pag sheep → milk and meat (70 : 30), semiintensive production system
 - Cres sheep and Dalmatian pramenka → mainly for meat, extensive production system

Istrian sheep

- Adult live weight: males 90 kg, females 65 kg
- Litter size: 1.05
- Lambing index: 1.00



Istrian sheep	Males	Females	Average
Age at slaughter (days)	62	67	63
Slaughter weight (kg)	21,50	19,10	20,15
Carcass weight (kg)	11,30	10,00	10,60
Dressing percentage	52,35	52,36	52,35





Pag sheep

- Adult live weight: males 52 kg, females 43 kg
- Litter size: 1.03
- Lambing index: 1.00



Pag sheep	Males	Females	Average
Age at slaughter (days)	34	33	34
Slaughter weight (kg)	10.80	10.20	10.60
Carcass weight (kg)	6.10	5.70	6.00
Dressing percentage	56.80	56.10	56.50





Cres sheep

- Adult live weight: males 55 kg, females 45 kg
- Litter size: 1.03
- Lambing index: 1.00



Cres sheep	Males	Females	Average
Age at slaughter (days)	95	98	96
Slaughter weight (kg)	22.30	19.00	21.52
Carcass weight (kg)	11.40	10.00	10.71
Dressing percentage	49.90	51.00	50.37



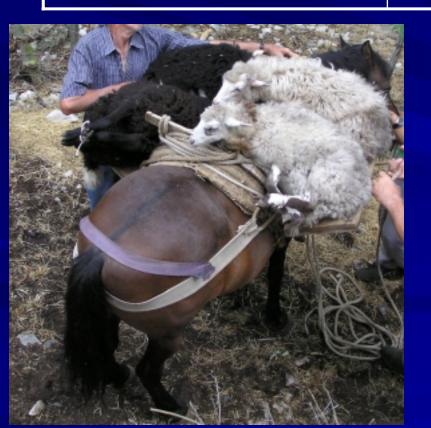


Dalmatian pramenka

- Adult live weight: males 55 kg, females 40 kg
- Litter size: 1.07
- Lambing index: 1.00



Dalmatian pramenka	Males	Females	Average
Age at slaughter (days)	104	102	103
Slaughter weight (kg)	18.80	18.60	18.70
Carcass weight (kg)	10.60	11.20	10.80
Dressing percentage	57.00	60.00	59.00





Conclusions

- Croatian sheep husbandry → breed = production system
- Autochthonous sheep breeds studied → low prolificacy and low productivity (kg carcass/ewe/ year)
- Slaughter traits of lambs largely affected by deeply rooted tradition of sheep breeding in a specific region (island)
- Great productive potential due to the enormous possibilities of consumption on local and European level