GRAZING BEHAVIOUR AND BODY-WEIGHT GAINS OF STEERS GRAZING AT CANTABRIAN MOUNTAIN PASTURES

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Servicio Regional de Investigación y Desarrollo Agroalimentario (SERIDA)

Zaragoza, 14th June 2016
INTRODUCTION

Steer meat highly demanded by consumers
deficient production in North of Spain

Meat production focused on beef from young or yearling calves

Extensive production
- economically sustainable
- production costs
- reliance on food purchased outside the farm
- better use of pastures
INTRODUCTION

Valley-mountain system

Typical beef cattle management system in Asturias

- Spring and Autumn: animals grazing in lowland pastures
- Summer: animals grazing in common high mountain pastures
- Winter: animals housed
INTRODUCTION

Asturian local breeds

Asturiana de los Valles
- Asturian valleys
- Meat production

Asturiana de la Montaña
- Eastern Asturias
- Endangered breed
- Meat-milk-work
OBJETIVE

Compare the productive performance and grazing behaviour of yearling steers from AV and AM breeds, grazing during summer in mountain pastures consisting in 70% grassland and 30% heathland.
MATERIAL AND METHODS

Study site and experimental animals

Puertos de Agüeria, Quirós

Experimental field

33 ha, 1600-1750 m.a.s.l.

70% grasslands

*Festuca rubra*
*Agrostis capillaris*
*Nardus stricta*

30% heathland

*Calluna vulgaris*
MATERIAL AND METHODS

Study site and experimental animals

42 yearling steers AV and AM
Born between 2010 and 2013

Born
(winter-spring)

Weaned
(7-10 months)

Castration
(1 year)
MATERIAL AND METHODS

1st year: as suckling calves
2nd year: steers grazing

Spring and Autumn grazing
Winter

1st year: as suckling calves
2nd year: steers grazing
MATERIAL AND METHODS

Measurements

Animals weighted at the beginning, middle, and end of the grazing season.

Grazing times recorded in July and September.

Availability of pasture assessed by monthly measuring the sward height in the grassland.
MATERIAL AND METHODS

Statistical analysis

• Factorial ANOVA
  Effects: Breed Year
  BW changes

• Repeated measures ANOVA
  Effects: Breed Year Season
  Grazing behaviour
RESULTS

AV and AM were grazing for similar time

Grazing time increased from July to September while grass availability decreased
RESULTS

Body weight changes of steers from AV and AM breeds grazing at Cantabrian mountain pastures during summer

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<thead>
<tr>
<th>Breed</th>
<th>Significance</th>
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<th>Year (Y)</th>
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CONCLUSIONS

- AM steers are better suited than AV steers to mountain conditions.
- Smaller breeds have a better performance under less favoured conditions.
- AM animals are more adapted to graze on heathlands and on pastures with a minor nutritive quality.
THANK YOU!

Research funded by INIA (RTA 2011-00122) and co-funded by FEDER