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# Products of autochthonous Cika cattle in Slovenia

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# Cika cattle

- The only Slovenian autochthonous cattle breed
- The population is very heterogeneous (AI - Pinzgauer)
- Today - **1625 animals**
- Approximately 20 % of animals is in wanted phenotype



# Milk and beef production

- **Breeding goal** - dual purpose with the emphasis on milk production
- **Cika cattle mostly reared in the cow-calf system - beef production**
- **Milk production in traditional regions** for Alpine dairy-farming (vegetation period - Alpine mountain pastures)
- Milk processed into cheese, cottage cheese, fresh butter, sour milk
- Milk products sold to the hiking tourists

# The aim

- Cika cattle are nowadays reared mostly for beef production in cow-calf system
- The aim of our work was to get an insight into carcass quality of slaughtered Cika cattle



# Material and methods

- The data - in **slaughter houses** (2005 and 2006)
- Slaughtered Cika cattle were reared in the traditional production systems
- After the slaughter carcass **weight** was recorded
- **Carcass conformation** and **fatness** were scored according to the EUROP system
- **Net daily gain** was calculated

# Table: The number of slaughtered Cika cattle (2005-2006) (*\_gur et al., 2006; \_gur et al., 2007*)

| Category |                     | 2005 |            | 2006 |            |
|----------|---------------------|------|------------|------|------------|
|          |                     | Cika | All breeds | Cika | All breeds |
| A        | Bulls < 24 months   | 38   | 49862      | 97   | 53949      |
| B        | Bulls > 24 months   | 37   | 20358      | 38   | 19824      |
| C        | Steers              | 5    | 550        | 6    | 562        |
| D1       | Cows < 5 years      | 9    | 9170       | 14   | 7302       |
| D2       | Cows > 5 years      | 16   | 17045      | 25   | 13888      |
| E        | Heifers < 30 months | 10   | 16108      | 7    | 14571      |
| T        | Calves              | 30   | 27520      | 26   | 23938      |
|          | Total               | 145  | 140613     | 213  | 134034     |

## Table: Carcass weight and net daily gain of Cika cattle (2005 and 2006)

| Category |                     | Carcass weight | Net daily gain |
|----------|---------------------|----------------|----------------|
| A        | Bulls < 24 months   | 260.0 ± 69.4   | 473.2          |
| B        | Bulls > 24 months   | 327.9 ± 57.6   | 374.5          |
| C        | Steers              | 272.4 ± 54.2   | 300.6          |
| D1       | Cows < 5 years      | 243.1 ± 57.6   |                |
| D2       | Cows > 5 years      | 268.2 ± 61.6   |                |
| E        | Heifers < 30 months | 191.1 ± 45.7   | 315.9          |
| T        | Calves              | 89.1 ± 26.9    | 731.5          |

## Table: Carcass weight and age at slaughter of three Spanish rustic breeds (Gil *et al.*, 2001) and of Cika bulls

|                         | Asturiana de la Montaña | Morucha | Avileña-Negra Ibérica | Cika bulls |
|-------------------------|-------------------------|---------|-----------------------|------------|
| Carcass weight (kg)     | 249.9                   | 259.9   | 279.4                 | 260.0      |
| Age at slaughter (days) | 541.0                   | 438.9   | 363.3                 | 558.0      |
| Net daily gain (g/days) | 461.9                   | 592.2   | 769.1                 | 473.2      |

## Table: The conformation scores

| Score    | Bulls < 24 months<br>(A category) (n=104) | Bulls > 24 months<br>(B category) (n=55) | Calves<br>(T category) (n=38) |
|----------|---|--|-------------------------------|
| <b>E</b> | <b>0 %</b>                                | <b>0 %</b>                               | <b>0 %</b>                    |
| <b>U</b> | <b>2.9 %</b>                              | <b>7.3 %</b>                             | <b>5.3 %</b>                  |
| <b>R</b> | <b>28.8 %</b>                             | <b>41.8 %</b>                            | <b>39.5 %</b>                 |
| <b>O</b> | <b>64.4 %</b>                             | <b>45.5 %</b>                            | <b>52.6 %</b>                 |
| <b>P</b> | <b>3.8 %</b>                              | <b>5.5 %</b>                             | <b>2.6 %</b>                  |

## Table: The fatness scores

| Score | Bulls < 24 months<br>(A category) (n=104) | Bulls > 24 months<br>(B category) (n=55) | Calves<br>(T category) (n=38) |
|-------|---|--|-------------------------------|
| 1     | 1.9 %                                     | 1.8 %                                    | 7.9 %                         |
| 2     | 59.6 %                                    | 47.3 %                                   | 89.5 %                        |
| 3     | 37.5 %                                    | 49.1 %                                   | 2.6 %                         |
| 4     | 1.0 %                                     | 1.8 %                                    | 0.0 %                         |
| 5     | 0.0 %                                     | 0.0 %                                    | 0.0 %                         |

# Cika beef production in Slovenia

- Slaughtered in the registered slaughterhouses
- Cattle were reared for self-supply
- The minor share of beef is sold to people in the farm neighbourhood
- Beef is sold without any trade mark – opportunity to add value to Cika beef
- The quality of Cika beef should be better promoted (small quantities)

# Agro tourism and Cika

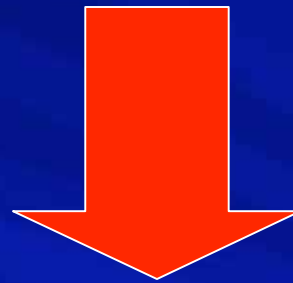
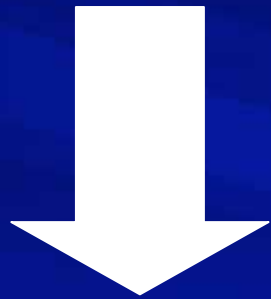
- only 5 agro tourism in Slovenia, which also keep Cika cattle
- the offered products: dry meat products like sausages and salami
- 1 private slaughterhouse - prefer to slaughter and process meat of autochthonous Slovenian breeds

# Conclusion

- great variability in carcass traits
- which phenotype to preserve



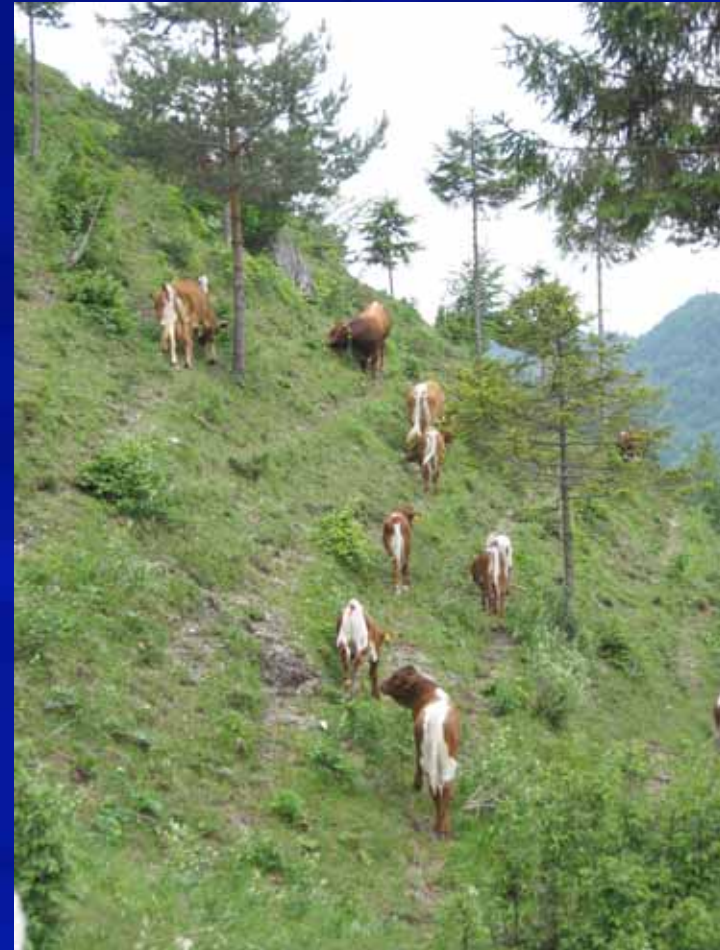
Light Cika –  
milk production



heavier Cika cattle with larger  
frame and body weight -  
extensive beef production in  
cow-calf system on pastures

# Conclusion (2)

- Autochthonous Cika is well adapted to the environment and also helps to maintain biodiversity and sustainable agricultural production, especially in remoted areas.



**Thank you for your attention!**

