Study of origin and conservation strategy of the Pramenka sheep breeds as regional transboundary breeds

Istrian Pramenka
and
Bela Krajina Pramenka

Drago KOMPAN
Slovenia

Second ERFP project meeting
(04-07 June 2009, Belgrade, Serbia)
Bela Krajina Pramenka (eng)  
Belokranjska pramenka (slo) 

Origin – history

• Slovenian autochthon breed;  
• it was once bred on both banks of the river Kolpa  
• mainly in the rolling hills of the karst region of Bela Krajina  
• the means for farming are poor  
• the sheep are quite small  
• Purebred animals are found in the surrounding areas of Adlešiči, Marindol and Žuniči
Bela Krajina Pramenka
Breeding females in herd book
(year)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of breeding females</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>311</td>
</tr>
<tr>
<td>2004</td>
<td>657</td>
</tr>
<tr>
<td>2005</td>
<td>728</td>
</tr>
<tr>
<td>2006</td>
<td>840</td>
</tr>
<tr>
<td>2007</td>
<td>775</td>
</tr>
<tr>
<td>2008</td>
<td>687</td>
</tr>
</tbody>
</table>
Istrian Pramenka (eng)
Istrska pramenka (slo)

Origin – history

In the region of Karst and Istria sheep breeders have traditionally bred domestic, autochthonous sheep which they called Istrianka, Karst Sheep,

In those days sheep breeding was well developed in the above mentioned parts of Slovenia.

The short and long Transhumance was well known in the past and were bred mainly for their unusual characteristics: their distinct long-stepping walk and ability to graze in rocky terrain

Main production: milk
<table>
<thead>
<tr>
<th>Year</th>
<th>Number of breeding females</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>600</td>
</tr>
<tr>
<td>2003</td>
<td>1200</td>
</tr>
<tr>
<td>2004</td>
<td>1200</td>
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<tr>
<td>2005</td>
<td>1100</td>
</tr>
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<td>2006</td>
<td>1100</td>
</tr>
<tr>
<td>2007</td>
<td>1200</td>
</tr>
<tr>
<td>2008</td>
<td>1150</td>
</tr>
</tbody>
</table>
Istrian Pramenka (eng)
Istrska pramenka (slo)

Origin – history

The Istrian Pramenka is of quite a large frame, owing to the highly placed torso and long strong legs. Its udders are shaped right, fastened high, with large teats. Its slim head, with the nose’s crest and jutting out ears, is placed on a long neck. Thus, the sheep can use their slim snout to find even the best hidden blades of grass in between the rocks and boulders of Karst.

The sheep’s multicolored wool does not cover the animals’ entire body; their legs and belly are naked of wool, and in other parts they are only covered with shaggy fleece.
Breeds on web and database

```
<table>
<thead>
<tr>
<th>Country</th>
<th>Breeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>15</td>
</tr>
<tr>
<td>France</td>
<td>13</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>12</td>
</tr>
<tr>
<td>Greece</td>
<td>5</td>
</tr>
<tr>
<td>Slovenia</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Brecknock Hill Cheviot
2. Cheviot
3. Clun Forest
4. Dalesbred
```
Breeds on web and database

Breed Data Sheets

**belokranjska pramenka/Sheep/Slovenia**

**Breed names**

- **Most common name**: belokranjska pramenka
- **Language**: sloven.

**Breed local names**

<table>
<thead>
<tr>
<th>Other name</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bela Krajina Pramenka</td>
<td>eng.</td>
</tr>
<tr>
<td>Belokranjska pramenka</td>
<td>sloven.</td>
</tr>
<tr>
<td>Belokranjska</td>
<td>sloven.</td>
</tr>
</tbody>
</table>

**Origin and development**

- **Herdbook**: Yes
- **Herdbook established in**: 1997
Breeds on web and database

EFABIS - European Farm Animal Biodiversity Information System

Breed Data Sheets
Istrska pramenka/Sheep/Slovenia

Breed names
- Most common name: Istrska pramenka
- Language: sloven.

Breed local names
- Other name: Istrian Pramenka, Istrijanka, Primorska ovca, Kraska ovca
- Language: eng., sloven.

Origin and development
- Herdbook: Yes, established in 1994
- Description of origin: Slovenian autochtonous breed; the Istrska pramenka is sheep breed which was once bred in the region of Karst and Istria.
- Location within country: The best known breeders are in Karst and in Istra (in Presnica and Socerb, Dolenja was as well as in Bistra, Pivsko and Postojna)
Breeds on web and database

Biotechnical Faculty, Zootecniška Department
Ministry of Agriculture, Forestry and Food

OHRANJENE SLOVENŠKE AVOHTONE DOMAČE ŽIVALI
OPIS IN SLIKOVNI PRIKAZ NEKATERIH VRST

THE PRESERVED SLOVENIAN AUTOCHTHONOUS DOMESTIC ANIMALS

Slovenške avtohtone domače živali | Slovenian Autochthonous Domestic Animals
---|---
Lipavec | The Lipizzaner Horse
Presavec | The PresaHo Horse
Slovenčina slovácká kôň | The Slovenian Cold-Blooded Horse
Šalka | The Shetland Pony
Jemlínka | The Jacob Sheep
Pastirka | The Italian Prizzi-Mangalitsa
Rabčička | The Bala Kajszka Pramancica
Jerevžanka | The Jerevžanka-Slovenčina kôň
Rotinka | The Krinkle Heinrichs
Dobšanka | The Dóška Rončka
Korčáž | The Kamnik Homebreed
Kvečina | The Krka Polish Pony
Ravena | The Akhal-Teke
Soča poštov | The Marble Cutch
Breeds on web and database
## PrP Genotyping

### Table 3. PrP allele frequencies, %

<table>
<thead>
<tr>
<th>Breed Pasma</th>
<th>Allele / Alel</th>
<th>ARR</th>
<th>AHQ</th>
<th>ARH</th>
<th>ARQ</th>
<th>VRQ</th>
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</thead>
<tbody>
<tr>
<td>JS</td>
<td></td>
<td>17.4</td>
<td>7.4</td>
<td>8.3</td>
<td>63.2</td>
<td>3.7</td>
</tr>
<tr>
<td>JSR</td>
<td></td>
<td>17.8</td>
<td>7.9</td>
<td>0.9</td>
<td>69.7</td>
<td>3.8</td>
</tr>
<tr>
<td>BP</td>
<td></td>
<td>35.0</td>
<td>4.3</td>
<td>0.6</td>
<td>58.6</td>
<td>1.4</td>
</tr>
<tr>
<td>T</td>
<td></td>
<td>52.7</td>
<td>4.8</td>
<td>12.4</td>
<td>26.3</td>
<td>3.8</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>16.9</td>
<td>17.4</td>
<td>7.6</td>
<td>57.1</td>
<td>1.0</td>
</tr>
<tr>
<td>VFB</td>
<td></td>
<td>22.0</td>
<td>24.6</td>
<td>2.5</td>
<td>50.0</td>
<td>0.9</td>
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<tr>
<td>IP</td>
<td></td>
<td>32.5</td>
<td>7.5</td>
<td>0.1</td>
<td>57.2</td>
<td>2.6</td>
</tr>
</tbody>
</table>

JS – Jezersko-Solcava; JSR – Improved Jezersko-Solcava; BP – Bela Krajina pramenka; T – Texel; B – Bovec; VFB – Improved Bovec; IP – Istrian pramenka
Thank you