



## **VALORISING NATURAL PASTURES AND LOCALLY ADAPTED FORAGE SPECIES IN SHEEP FARMING**

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**Abstract:** *This paper explores the valorisation of natural pastures and locally adapted forage species in sheep farming, drawing on a wide range of recent international literature to identify current research trends and practical applications. Using a bibliographic research approach, the authors synthesize findings from scientific articles and specialized books to provide a comprehensive overview of how natural grazing resources can be more effectively utilized within sustainable production systems. The study emphasizes that natural pastures, when properly managed, represent a cost-effective and ecologically sound foundation for sheep nutrition. A key focus of the paper is the role of locally adapted forage species, which are often better suited to regional climatic and soil conditions than introduced varieties. These species typically exhibit greater resilience to environmental stressors such as drought, poor soils, and temperature fluctuations, while also contributing to biodiversity conservation. The authors identify core strategies for enhancing pasture value, including controlled grazing, rotational systems, pasture improvement techniques, and the preservation of native plant diversity. In addition, the paper discusses practical solutions for integrating locally adapted forage species into sheep farming systems. These include reseeding with native species, mixed-species swards, and adaptive management practices tailored to local ecological conditions. By aligning feeding strategies with natural resource availability, farmers can reduce reliance on external inputs and improve long-term sustainability. Overall, the study highlights the importance of combining traditional knowledge with modern research to optimize pasture use and support resilient, efficient sheep production systems.*

### • **Introduction**

Natural pastures matter in sheep farming because they are typically adapted to local climate and rich in plant diversity, and because they require minimal inputs.

Well managed, they can:

- Enhance biodiversity and soil carbon storage;
- Improve animal health through diverse forage species with medicinal properties;
- Increase resilience to climate variability and drought;
- Reduce feed costs by replacing purchased concentrates or hay;

- Support premium labels (e.g. "mountain pasture", "pasture-raised", or "traditional grazing");

Locally adapted forage species matter in sheep farming because they bring a combination of ecological fit, low-input resilience, and nutritional value that commercial cultivars rarely match.

In regions like Banat, the Carpathians, and the Western Hills – all in Romania – these species are often the backbone of traditional sheep systems. Thus, they:

- Maintain productivity with minimal fertiliser or irrigation;
- Preserve landscape identity and local biodiversity;
- Reduce dependency on purchased feed and reseeding;
- Support animal health through diverse secondary compounds (i.e. antioxidants, essential oils, and tannins);
- Tolerate drought, frost, grazing pressure, and poor soils better than introduced species.

### • **Material and method**

The authors of this paper have consulted recent articles and books on the topic of valorising natural pastures and locally adapted forage species in sheep farming in an attempt to capture research trends in the field worldwide. The research method used in the processing of these books and articles is the bibliographical one.

### • **Results and discussion**

Here are a few solutions for the local integration of adapted species into sheep farming:

#### - **Adapting grazing management:**

- Overgrazing suppresses legumes and herbs, while controlled rest periods help them recover;
- Rotational or strip grazing allows native species to express their full potential.

#### - **Encouraging natural regeneration:**

- Reduced grazing pressure during seed-setting periods (late spring-early summer) allows desirable species to reseed naturally – one of the strategies of regenerative agriculture.

#### - **Managing competition:**

- Light mechanical disturbance or targeted grazing can reduce aggressive species and open space for valuable natives.

#### - **Overseeding selectively:**

- Instead of full reseeding, lightly overseeding with native legumes (e.g. Lotus, Onobrychis) in thin patches preserves the natural character of the pasture.

#### - **Using mixed-species grazing:**

- Sheep combined with cattle or goats can balance grazing pressure and favour a more diverse sward.

### • **Conclusions**

Natural pastures often contain bioactive plants (e.g. aromatic herbs, tannin-rich legumes) that naturally reduce internal parasites and improve meat quality, which can reduce veterinary costs and support low-input systems. The benefits / positive impacts of natural pastures are numerous: better body condition from diverse forage, better immunity, better soil water retention, climate resilience, fewer digestive issues, higher animal health, higher product value, improved fertility, less reliance on concentrates and hay, lower feed costs, market differentiation, more organic matter, pastures withstanding drought better, and soil improvement.