



Short sward grazing (Kurzrasenweide) with dairy cows and reduction of concentrates

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1 Description of the innovation



The farm is part of the Professional School of Agriculture and Home Economics in Salern/ Brixen (South Tyrol, NE Italy), where pupils (on average 14 to 16 years old) can gain theoretical knowledge about animal farming and put it into practice. Profit is not the main focus of the institution, with the farm fulfilling also didactic tasks. The organic farm consists of 14 ha of meadows and pastures, of which 7.5 ha are owned by the school and 6.5 ha are leased. 13 % of the area is exclusively grazed and 4.5 % is exclusively mown. A combination of mowing and grazing is practiced on the main part of the area (82.5 %). Because of didactic reasons, four different cow breeds and milk sheep are kept. During the summer the livestock grazes on the pastures around the farm buildings. The practiced grazing management type for the cows is a continuous variable stocking (short sward grazing, Germ: "Kurzrasenweide" - sward height always kept under 8 cm) mostly combined with a mowing use. Approximately one fourth of the whole area, depending on weather conditions and number of animals, is grazed since the begin of the growing season until the remaining area has been mown the first time and its herbage achieves the suitable growing height for grazing. Then most of the grazed area is let grown for hay and the mown area is grazed. The practiced grazing management type for the sheep is a continuous stocking.



Since 2016 a reduction of concentrates in the ration has been implemented. A maximum of 450 g cereals per cow per lactation has been fed.

This is only possible because of the high forage quality (only dry forage, no silage), which is achieved thanks to the well-working barn-drying system with heating combined with a dehumidifier.

Added value



- Better economic results
- Increase of livestock production quality

Reasons for the innovation

- Ethic—ecological reasons (no withdrawal of arable land in developing countries, which would be suitable for food production)
- Decreasing costs (independence of price fluctuations of concentrates)
- Production of hay milk (silage-free milk production)



2 Farm description

ENVIRONMENT

Main soil types: sandy; sandy-loam

Climate: temperate continental climate

Average altitude (m a.s.l.): 809 (735 m to 906 m)

Average slope (%): 28 (10 % to 50 %)

GRASSLAND MANAGEMENT

Grazing: Yes, partially combined with cut use

Grazing management type:

Cows: combination of continuous variable stocking (short sward grazing) and mowing

Sheep: continuous stocking

Length of the grazing period (months/year):

cows: 7; sheep: 5

Number of cuts for exclusively mown areas: 3 cuts/year

Conservation type: hay

STRUCTURE

Annual work units: 2 (including the didactic duties)

Agricultural area (ha UAA): 14 ha

0.7 ha meadows

1.9 ha pastures

11.4 ha grazing combined with mowing

Arable land area: 1200 m²

ANIMAL PERFORMANCE

Breed type:

Cows: Braunvieh(12), Simmental (6), Grauvieh (5), Holstein Friesian (3)

The number in brackets shows the number of animals

Sheep: Lacaune

Total Livestock unit (LU): 21

Average stocking rate (LU/ha): 1.5

Reasons why this innovation is working on the farm

- Most of the areas are located around the farm; all other prerequisites for a grazing management are fulfilled, including an acceptable slope steepness
- The precipitation rate in the Eisack valley is low (≈ 670 mm/year*), which reduces the probability of mechanical damages to the sward caused by grazing animals
- High fodder quality because of an efficient barn-drying method with air heating and dehumidifier
- High motivation (School, didactic aim)

*meteorological station „Brixen Vahrn“, hydrographic department, province of Bolzano

Country shapes



Domains of innovation



Machinery, tools



Forage mixture



Forage conservation technique



Grazing management system



Legume management



Animal feeding management



Animal type (breed)



Product processing



Marketing



Farm system



Landscape

Main types of animal

