

# The chemical analysis of fresh grass before cutting



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The chemical analysis of protein and fiber content in fresh grass is carried out in order to capture the best moment for cutting and harvesting plant material collected from grasslands.

SM (sucha 189,00 VEM (jedn. 1064,00 VEM (prodi 201,00 g/kg proc BS (białko 143,00 BS (blałko ogólne prod g/kg prod Kg SM CF (Włókno 167,00 Ikg prod CF (Włókno sur. produł g/kg prod ASH (popió 92,00 ASH (popió 17,00 1C-OC IVC 88.10 g/kg SM g/kg prod

Added value: Increasing grassland quality (feeding value)

### The farmer's strategy

The farmer cooperates with the private company, that invited her to participate free of charge in the GrassMap programme in 2016. She was interested in the subject, so she agreed. The programme included taking grass samples every week and testing in the laboratory shortly afterwards. The farmer had an on-line access to all results and their interpretation. Having knowledge about current protein and fiber content in the sward the farmer could more easily indicate the best time for cutting and harvesting. The first mowing took place around 12 May, which caused astonishment of local farmers who usually cut grasses for the first time at the end of May. In Poland, methods of chemical analysis of grass are known well by scientists. Laboratory analyses of fresh grass are mainly carried out by research centers, that cooperate with selected farmers. They are not widely used in agricultural practice.



## 2 Farm description

#### **ENVIRONMENT**

Soil types : Sandy, Sandy-Ioam Climate: Warm-summer humid continental Altitude : 117 m a.s.l . Slope : 0% **GRASSLAND MANAGEMENT** All of the grasslands are exclusively mowed. The sward is conserved by making haylage.

#### STRUCTURE

Annual Work Unit: 5 Agricultural Area: 180 ha UAA Main forage area: 95 ha Arable land area: 155 ha Permanent grassland area: 25 ha Temporary grassland area: 10 ha Other green forage area: 60 ha Average stocking rates:

- agricultural area 1.5 LU/ha
- main forage area 2.9 LU/ha
- grassland area 8.3 LU/ha

#### ANIMAL PERFORMANCE

Dairy cows: 175

Total livestock units: 281.05 LU

Milk production per head: 11500 (l/year)

### WHY IT IS WORKING

The farmer cooperates with advisors employed by the private company. The owner of the farm had an on-line access to all results and their interpretation. Having knowledge about current protein and fiber content she could more easily indicate the best time for cutting and harvesting.

# **Country** shapes



## **Domains of innovation**

| 8.  | Machinery, tools              |    | Animal type (breed) |
|-----|-------------------------------|----|---------------------|
| ¥   | Forage mixture                |    | Product processing  |
|     | Forage conservation technique |    | Marketing           |
|     | Grazing management system     | 00 | Farm system         |
| *** | Legume management             | 3  | Landscape           |
|     |                               |    |                     |

Animal feeding management

# Main types of animal

