

## EVALUATION OF COW MILK PRODUCTION DURING THE GRAZING PERIOD OF NATURA 2000 GRASSLAND HABITATS

Teodor MARUSCA<sup>1</sup>

**Abstract.** *In livestock development strategy, a country's permanent grasslands play an important role. After the pastoral value, green mass production and animal load of the Natura 2000 grassland habitats were broadly established, it was possible to assess milk production per hectare as the final productivity outcome. Normal vegetation habitats 1530\*, 2340\*, 6150, 6210, 6240\*, 62CO\* and 6520 averaged 5.58 t/ha green matter (GM) with a loading of 0.57 cattle units (LU) per hectare in 150 days of grazing, a pastoral value (PV) of 38.1 and finally 3,250 liters of milk/hectare. Through the degradation of the grassy carpet, a part of Habitats 6150, 6240 and 6520 achieves approx. three times less namely 1.65 t/ha GM in 140 days of grazing with 0.18 LU/ha and 14.6 PV providing 1,160 l/ha cow's milk. The most valuable habitat is 6520, Mountain grasslands that produce almost 6,000 l/ha of cow's milk at 65 PV and 11.75 t/ha GM and the least productive is Habitat 2340\* Pontic continental dunes that produce 870 l/ha of cow's milk. These data are used to draw up the arrangements and development strategy of the pastoral heritage.*

**Keywords:** grasslands habitats, pastoral value, green mass production, milk production

**DOI** <https://doi.org/10.56082/annalsarsciagr.2023.2.38>

### 1. Introduction

Expressing grassland productivity through grass production (green mass, hay, etc.) and fodder quality (pastoral value, protein content, useful minerals, digestibility, etc.) is important but not sufficient for livestock grazing use [10].

During grazing season, in addition to the species and category of animals, climatic factors intervene, especially the air temperature at altitude, with days reaching over 10 degrees Celsius, which is equal to the optimal grazing time [4].

Green mass production and daily and seasonal requirements directly influence the optimal load with animals expressed in livestock units per hectare. [11].

Finally, expressing the productivity through animal products such as live weight gain (meat), milk, wool, etc., includes production with feed quality, climatic and growing conditions [10].

---

<sup>1</sup>PhD. Eng. Research - Development Institute for Grasslands, Braşov, Romania, Full Member of Academy of Romanian Scientists (E-mail: maruscat@yahoo.com)