

CONTRIBUTIONS ON THE ESTABLISHMENT OF PRODUCTIVITY INDICATORS FOR COW MILK PRODUCED IN THE CARPATHIAN MOUNTAINS

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Abstract. *Assessing the productivity of a pasture in animal product, such as live weight gain or milk production, is very important for establishing creditworthiness levels, planning, valorisation, fees, subsidies, etc. In an experience with dairy cows on an improved pasture, in the Bucegi Mountains, located at 1,800 m altitude, after 20 years, a coefficient of correlation statistically assured between pastoral value and milk production in the grazing season has been determined. Using this coefficient of 51.24 by multiplying it by the pastoral value, it is possible to directly estimate the milk yield per hectare of an improved pasture exploited in a rational way. For the mountain area with usual precipitations, this coefficient has a gradient of - 4.5 / 100 m altitude, respectively from 98, for 600 - 800 m with a duration of 160 grazing days, to 35 for 2,000 – 2,200 m m, where dairy cows graze for an average of 55 summering days.*

Keywords: pastoral value, grazing, cows, milk production coefficient, altitudinal gradient

1. Introduction

The mountain pastures in the Carpathians represent the main fodder source for raising sheep and cattle (Bărbulescu, Motcă 1983, Burcea et al. 2007) [1,2]. The expression of the productivity of pastures utilised by grazing in animal production is the most faithful economic indicator. In this sense, experiments were initiated with young bulls in which the increase in live weight was recorded (Vladeni, Persani Mountains 600 m alt.) And with cows in which milk was measured (Moroieni, Bucegi Mountains, 1,800 m alt.) (Marușca 1973 , Marușca et al. 2002) [4,5].

Obviously, these animal experiments are more difficult to carry out in the mountain area, so it is necessary to evaluate animal production by indirect means

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