COMPARATIVE STADY OF PASTORAL VALUE OF SOME *ALOPECURUS PRATENSIS* L. POPULATIONS COLLECTED FROM WESTERN ROMANIA

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Abstract: *Alopecurus pratensis L. is one the most valuable fodder plants , with a high adaptability , high digestibility expendability and also called for a proper green mass production . In caeasta work were analyzed populations from different geomorphological areas of Banat. Input characters were taken into account : production capacity , plant height , dry matter content and the crude protein . Average production Alopecurus pratensis L populations Varied between 21t and 24 t of biomass. Plant height is Another decisive in terms of the amount of biomass Produced. It ranges in height from 67 cm to populations Torontalului Plain up to the height of 105 cm common in populations Caransebesului Depression . The dry matter content is Another character Taken into Account When discussing about the value of forage plants . It has the Largest value in populations Originating from Torontalului Plain . Crude protein content is Directly proportional to the solids being the Maare Torontalului Plain populations of the Smallest populations and the content of the hill.*

Key Words: *Alopecurus pratensis, pastoral value, chemical composition, biomass, crude protein content*

INTRODUCTION

Alopecurus pratensis L. belongs to the family Gramineae, genus Alopecurus. Genus *Alopecurus pratensis Alopecurus* L. with part of Festucoideae subfamily. The first description of the genus *Alopecurus* was made by Linnaeus in the first edition of "Plantarium Species" (1753).

The etymology of the word that names like *Alopecurus*, comes from the words of Greek origin fox Alopex and Oura-tail form on the inflorescence. According to the "Flora Europea" within the genus are the following species *Alopecurus Alopecurus pratensis* L., *Alopecurus arundinaceus* Poiset in Lan, *Alopecurus geniculatus* L. Axbrachystylus Peterm., *Alopecururs aeqvalis* Sobol., *Alopecurus himalaicus* Hooker., *Alopecurus alpinus* Sm in Sowerby., *Alopecurus setarioides* Gren.

Alopecurus pratensis is a valuable species in terms of feed, with wide spreading plains and wetlands. It is adapted to a cold climate, humid temperate, highly resistant to cold, but also can withstand high temperatures during the summer. It tolerance rainfall between 350 and 1750 mm. Motca describes as prevalent in meadows and depressions on gleyed alluvial soils gleyic softness, lacovisti, protosols alluvial colluvisols with pH values ranging between 4.5 and 7.5

Pastoral value of forage species is given by the value of forage (expendability digestibility, chemical composition) and its production.

MATERIAL AND METHODS

Biological material is represented by *Alopecurus pratensis* L. ecotypes from permanent meadows in the territory of 50 cities. These were grouped by regions

geomorphology of origin. Populations analyzed are: Populations of Torontalului Plain Low Ving Timis, Plain Gataiei Pogănişului, Hills Lugojului, Hills Lipovei, Depression Caransebesului.

Productive characteristics analyzed are: biomass production, plant height, dry matter content and crude protein content.

RESULTS AND DISCUSSION

Average production *Alopecurus pratensis* L populations varied between 21t and 24 t of biomass. Populations or in this case highlighted were those that came from the lower plains and hills Timis Pogănişului followed by Gataiei Plain populations. Quantity of biomass have lower populations and Lipovei Lugojului Hills (fig.1).

Plant height is another decisive in terms of the amount of biomass produced. It ranges in height from 67 cm to populations Torontalului Plain up to the height of 105 cm common in populations Caransebesului Depression. Plant height is genetically determined but influenced by environmental conditions, this explanation is probably much higher waist populations coming from places with abundant annual rainfall (fig. 2).

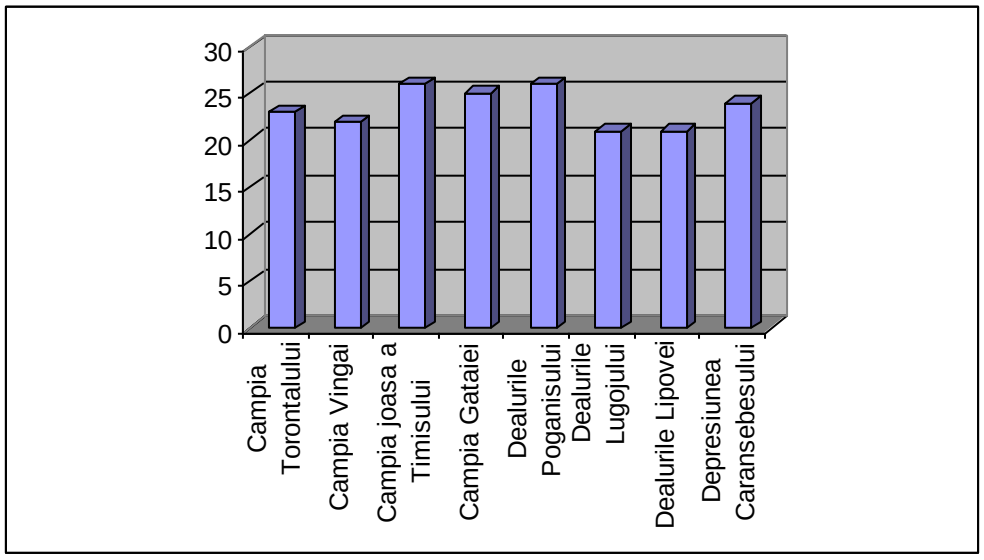

Fig.1. Graphic representation of the average production of biomass obtained by biotypes studied (t/ha)

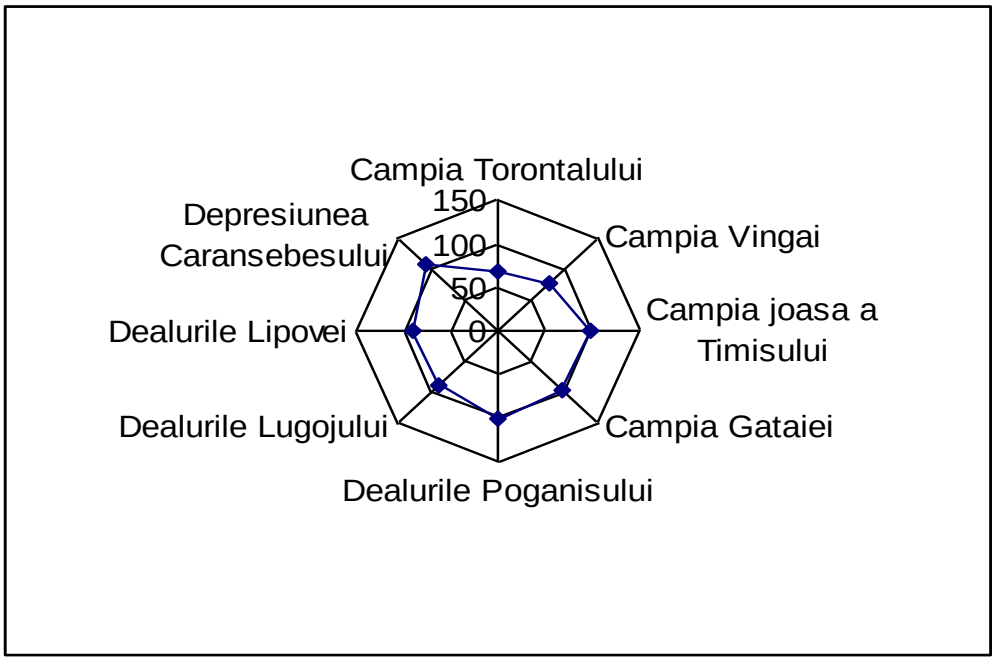

Fig.2. Graphic representation of average height biotypes studied (cm)

The dry matter content is another character taken into account when discussing about the value of forage plants. It has the largest value in populations originating from Torontalului Plain. This area is somewhat arid geomorphology and populations from that area all have a dry matter content above average. Lowest content being present in populations from the hills (fig.3).

Crude protein content is directly proportional to the solids being the Torontalului Plain populations of the smallest populations and the content of the hill (Fig. 4).

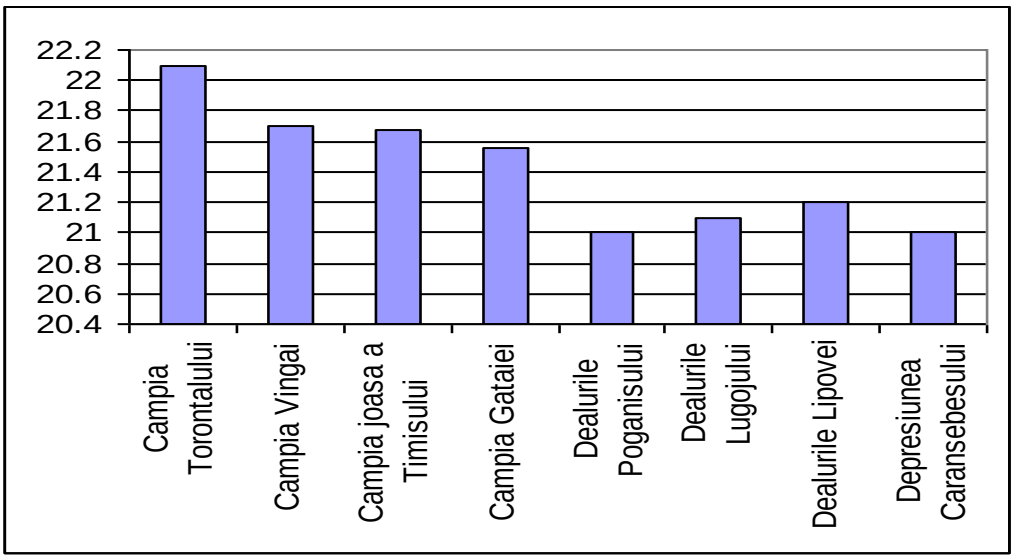

Fig.3. Graphic representation of average dry matter content of the biotypes studied (%)

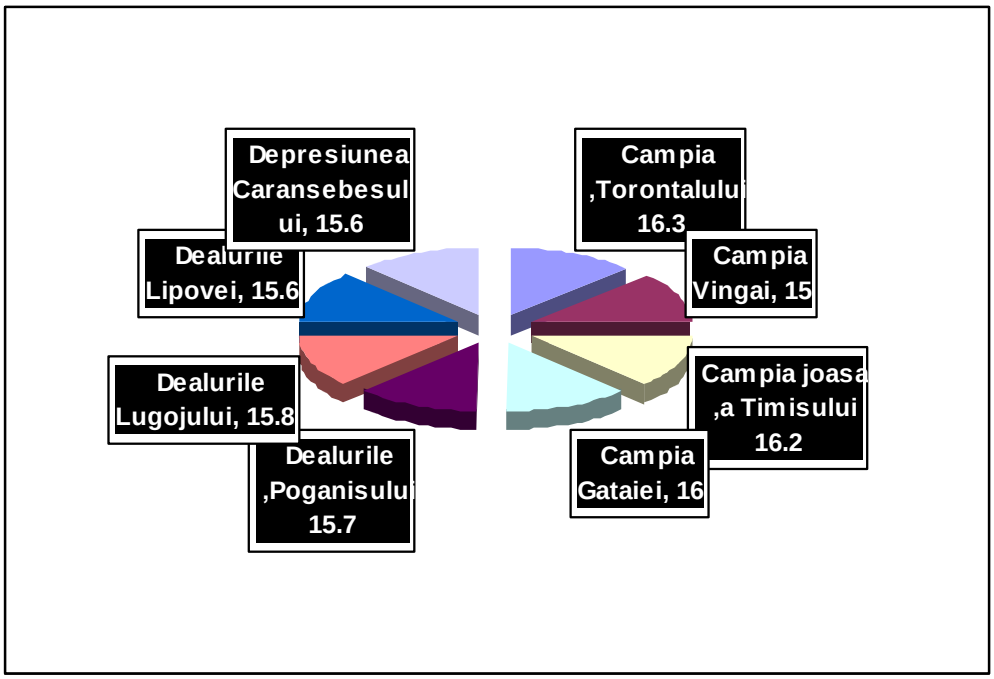

Fig.4. Graphic representation of the average crude protein content of the biotypes studied (%)

CONCLUSIONS

After analyzing the behavior of productive characters in some populations of *Alopecurus pratensis* L. from the west of Romania can draw the following conclusions:

1. Biomass production is directly proportional to plant size;
2. Solids content is directly proportional to the crude protein.

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