RESEARCH ABOUT SOME QUALITATIVE CHARACTERISTICS OF FODDER PRODUCTION WITH SIGNIFICANCE, IN TWO LIVE-STOCK FARMS FROM IASI REGION

CERCETĂRI ASUPRA UNOR INDICI CALITATIVI AI PRODUCŢIEI FURAJERE CU IMPORTANŢĂ ÎN NUTRIŢIA ANIMALIERĂ, ÎN DOUĂ UNITĂŢI DE PROFIL ZOOTEHNIC DIN JUDEŢUL IAŞI

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Abstract. *Paper makes the subject of study somes qualitative and reference indicatories for many fodder plants , the quality of thees plants beeng certainty and striking changed by fertilizers, by the trataments against plant's illness and insects ans in same way by the fertility of soils. Study was drown up in two some live-stock farms in Iasi area, wich are produceiung fodder base by their own forces.*

Key words: nutrition, foliar diagnosis, quality indices

Rezumat. *Lucrarea face obiectul studiului unor indici calitativi de referinta pentru o serie de specii furajere , calitatea furajelor fiind in mod cert si pregnant influentata de ingrasamintele utilizate , de tratamentele fitosanitare aplicate dar si de starea de fertilitate a solurilor . Studiul a fost intocmit in doua unitati de profil agro-zootehnic din judetul Iasi, care isi produc prin forte proprii baza furajera .*

Cuvinte cheie: nutritie, diagnostic foliar, indici de calitate

INTRODUCTION

Alfalfa, bean family plant, has a high resistance to drought, has the ability to grow in symbiosis with nitrogen-binding bacteria and is characterized by high nutritional value. Compared with grass, contains more protein, more Ca, Mg and S and less Mn and Zn, representing an important source of vitamins E, K, C, B - and xanthophylls pigments.

Lucerne is the most productive plant protein, the highest proportion of protein being recorded before bud, being the most widely used legume, both fresh and as a fan, in all types of animal feed. Generally, alfalfa hay is used in the calves, providing up to 40% of the energy requirements and over 50% of the herbivorous animal protein.

In the alfalfa fodder nutrient content is high and varies widely, depending on stage of vegetation

MATERIAL AND METHOD

Chemical analysis of plant serves to monitor different fertilization practices and to establish recommendations for fertilization, in conjunction with the analysis of soil

samples from the same location prelevete, with climatic conditions, plant health and culture targeting information, directly with technology applied.

The research took place over two years, 2007 and 2008, the Research and Development Station for Cattle-Dancu-Iasi and S.C.Daniela S.R.L Raducaneni-Iasi, both units specialize in breeding, with their forage base. After methodologies in force, have been identified and samples collected from the field average of entire plants, respectively that green alfalfa, alfalfa and sew a 3, alfalfa hay and from the fodder samples were taken from alfalfa hay bales.

Samples collected for analysis were prepared and subjected to further stages of analysis, being recorded in a first phase, the degree of contamination, their moisture and weight.

Analyses were performed:

- Determination of ash (%) by dry digestion by
- Determination of total nitrogen (N t,%), Kjeldahl method
- Determination of crude protein (PB,%)
- Determination of crude fiber (CB,%), method-Kürschner Schasser

RESULTS AND DISCUSSIONS

Plant material analysis results for the two locations are presented in figures 1,2,3 and 4

For location Dancu, green alfalfa simples 1-st and 3-rd scyte, the values of ash were determined by 1.9%, respectively 2.6% (fig. 1), 0.4% below the normal range and 0,3 % above normal values (2.3% ash).

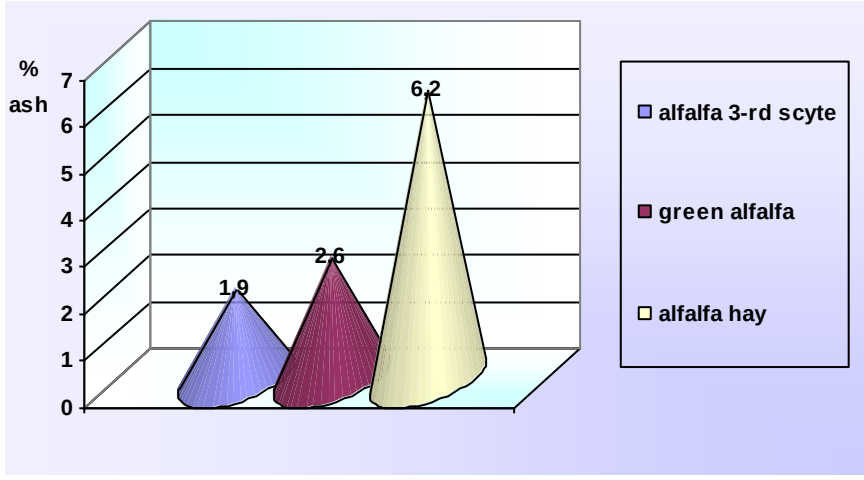

Fig. 1. Ash content (%) of samples of feed - farm Dancu

For the same samples Dancu, crude protein and crude fiber (PB and CB) had levels of 12.87%, respectively 13,21 % for alfalfa scythe 3-rd and 19,93 %, respectively 10,80 % for green alfalfa (fig. 2), content values are close to normal PB cited in the literature (16,5%) (Volf,2008)and under optimal for CB (18.0 to 20.0%).

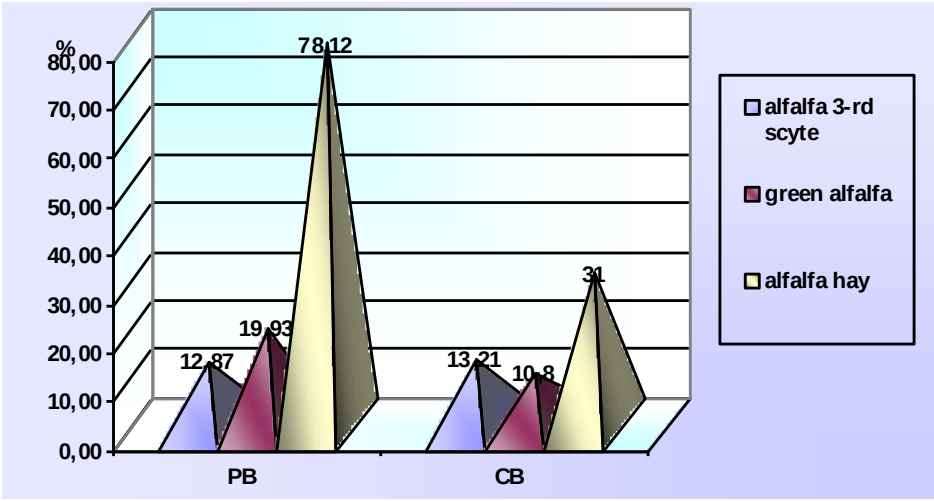

Fig. 2. PB and CB content in the samples of feed - farm Dancu

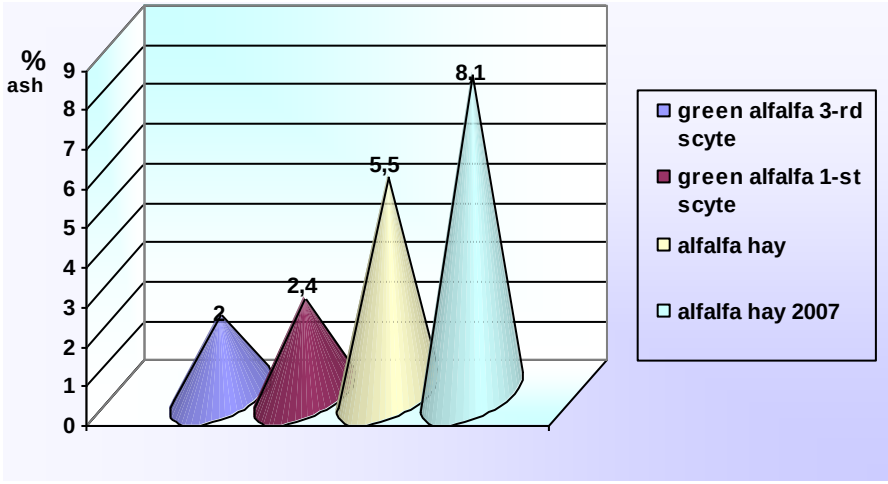

Fig. 3 Ash content of feed samples - farm Raducaneni

In samples of green alfalfa, first and third scythe Raducaneni, ash content had values of 2.4% and 2.0% (fig. 2), considered optimal levels (Bilteanu,1979), while crude protein and crude fiber values recorded 17.68%, respectively 14,4 % for first scyte,and normal values for PB and below normal for CB for third scyte (fig. 4)

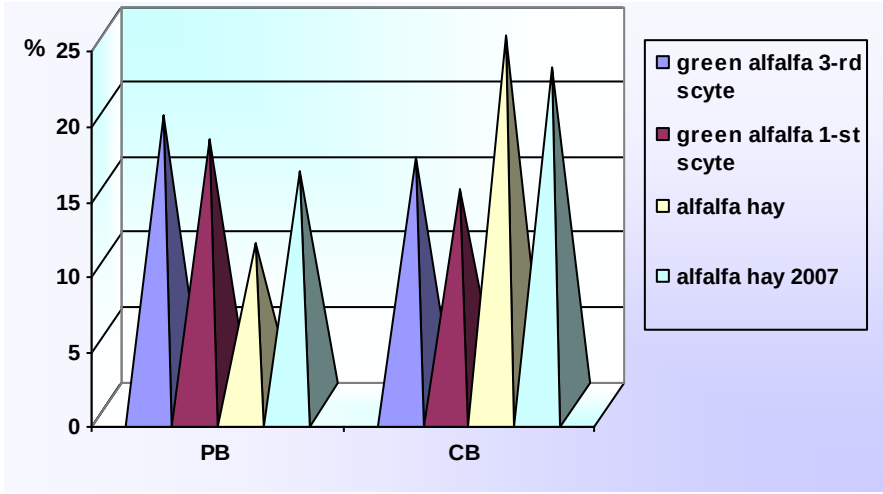

Fig. 4. PB and CB content in the samples of feed - farm Raducaneni

Alfalfa hay samples from farm Dancu and Raducaneni, register values to ashes of 9,3 (fig. 1), 5,5 and 8,1 % (fig. 3). For the same samples the content in PB and CB was within limits of 43,12% PB and 30,50 CB (fig. 2) respectevly 10,8% and 15,56% for PB and 22,53, respectively 22,40 for CB (fig. 4), values considered normal in specialized literatura, respectively easy under optimal

CONCLUSIONS

1. Forecast likely changes in nutritional status negatively (deficiencies, excesses, imbalances), by diagnosis foliar, allows the review and adaptation of system integrated nutrient in time and on fenofaze, for proper management of fodder in the soil-plant system

2. High soil fertility status associated with fertilization, especially those with nitrogen and potassium, a fund of phosphorus, significant effect on quality of production, namely the amount of protein per unit area.

3. The two indicators of quality of forage production, crude protein and cellulose, is positively correlated and have for both locations taken into study, optimum, suboptimal and easy above optimum values, possible mainly due to mild metabolic dysfunction, the quality feed remaining same **.**

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