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Effect of different storage period on nutritional ingredient of forage

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Key words forage, storage period, nutritional ingredient, dynamics, variation

Introduction The nutritional ingredients changes of forages in different storages periods is very important for the utilization of feed resources and the understanding of the different forage variation and reasonable storage and application.

Materials and methods 10 forages were sampled in forage park of Jilin Agricultural University at the beginning of October and the types of forage were shown in Figure 1. Normal nutrients of forage were determined every 30 days for four times. The results were analyzed with the least significant difference method of statistical analysis. Then we used spss 11.5 on 10 kinds of forage in all stages of nutrients storage cluster analysis of the pros and cons (Figure 1).

Results Variation value of nutritional ingredient of forages in different storages periods was got in different determined times. Nutritional ingredients were changed with storage time prolonged and the largest variation was in the first month of storage period. Crude water content was reduced by an average 20 percent in average, but some varieties which were increased due to ambient humidity and variety hydrosocopic property. There was a negative correlation between the content of crude protein and storage time, the content of crude protein was reduced by 40 percent in average as the storage time extended; Storage effectiveness of corn seed was better through statistics and induction, and loss of nutrition was little. It was harder to store for *Symphytum peregrinum ledeb* than that of *Agropyron cristatum* (Linn.) Gaertn.

Table 1 Forage varieties.

number	variety
1	<i>Agropyron cristatum</i> (Linn.) Gaertn.
2	<i>Bromus inermis leys</i> .
3	<i>Sorghum sudanense</i> (Piper) Stapf
4	Gaodan grass
5	Straw stalk
6	<i>Elymus dahuricus Turcz</i>
7	<i>Amaranthus hypochondriacus L. Cv</i>
8	<i>Digitaria cruciata</i> (Nees) A. Camus
9	<i>Euchlaena mexicanna Schrad</i>
10	<i>Symphytum peregrinum ledeb</i> .

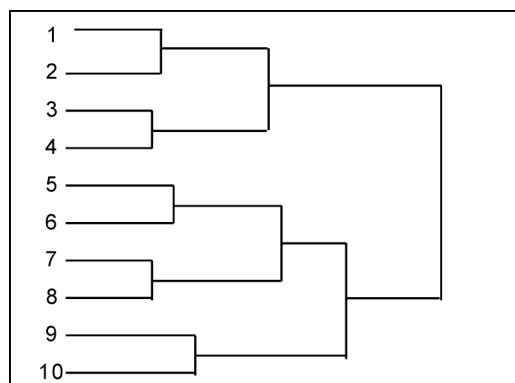


Figure 1 10 kinds of forage storage nutrient cluster analysis.

Conclusions There are some changes in nutritional ingredient of forages in different storages, especially in the first storage month. So this time should be noticed. Among all, corn is more suitable for feeding livestock in winter and spring.

Reference

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