

Abstract

The consumption of nutrients can be optimized by the recognition of the plants preference value grazing by sheep and its diet. In this regard, the present study examined the preference value of plant species for two age groups of Fashandy sheep in Eshtehard rangelands which are located in Alborz province. For this purpose, the species preference value for non-pregnant ewe with 1 and 3 old years by the timing method (using a chronometer) were studied in mid-spring. In this study for each age group, three animals were selected and one sheep were followed in the way of free grazing from 8 to 10 am every day. GLM test was used to investigate the effect of sheep's age and species on the preference value and their interactions on the preference value. Preference value comparison of plant species for each age class was performed using one-way ANOVA. Preference value comparison of each species for two livestock's age groups was performed using unpaired t-test. In general, preference value comparison for both groups of livestock was performed using one-way ANOVA. The results showed that the age of the sheep had a significant effect on preference value of plant species. So that three years old sheeps had significantly more spent time for graze of plant species. The highest preference value was related to herbaceous species such as *Plantago ovote* and *Stipa barbata* and the lowest preference value was related to bush and spiny species such as *Acantholimo narmenum*. Although the study livestock has few grazing time of bush and shrub species, but in most cases, this grazing time in three years old animals was more than one year old animals. In general, the results of this study showed that this area, it is better factors such as the age of the animal and plant species to be considered for livestock management. Moreover, the major grazing diet of this animal is based on herbaceous species.

Key words: Preference value, Fashandy sheep, Timing method, Eshtehard rangelands.



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**Determine the Preference Value of Plant Species for the Two Age Group of Fashandi
Sheep in Eshtehard Rangelands**

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