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Ginti & Ratry

Vallentine

Li and etal

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Vision

Stoddart and etal

Freer

Alison

Society for Range Management

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, *Salsola rigida*

*Anabasis* , *Anabasis anova* , *Artemisia siberi*

) *Seidlitzia rosmarinus setifera*

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*Achillea* , *Plantago lavendolata*

*Medicago* , *Eurotia ceratoides*, *berbersttini*

*Salvia* , *Agropyron elongatum* , *sativa*

*Agropyron* ( ) , *hypoleuca*

, *Agropyron pectiniformis* , *trichophorum*

) *Festuca ovina*, *Secale montanum*

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= Wm/Wf

(male m)

(female f)

= Wf

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$$DMD\% = \frac{(\text{CP}) - (\text{ADF})}{\text{DMD}} \times 100$$

$$ME = \frac{(\text{DMD})}{100} \times (\text{ME})$$

$$ME = \frac{(\text{DMD})}{100} \times (\text{ME})$$

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Oddy and etal  
 Standard Committee of Agriculture

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Maff  
 Crude protein  
 Acid detergent fiber  
 Dry matter digestible  
 Metabolizable energy  
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(CP)  
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Tukey

ME	%DMD	%ADF	%CP	
/ ± / e	/ ± / e	/ ± / b	/ ± / b	<i>Salsola rigida</i>
/ ± / d	/ ± / d	/ ± / a	/ ± / d	<i>Artemisia seiberi</i>
/ ± / c	/ ± / c	/ ± / d	/ ± / c	<i>Anabasis anova</i>
/ ± / b	/ ± / b	/ ± / b,c	/ ± / a	<i>Anabasis setifera</i>
/ ± / a	/ ± / a	/ ± / c	/ ± / a	<i>Seidlitzia rosmarinus</i>

*Achillea*

*Agropyron*

*Agropyron elongatum*

ADF

*Achillea berbersttini*

DMD

*Agropyron elongatum*

*Eurotia Achillea berbersttini*

*Agropyron elongatum*

ME

*Anabasis*

*Anabasis*

*Seidlitzia*

*Salsola rigida*

*Anabasis anova*

*Seidlitzia rosmarinus setifera*

*Artemisia siberi*

*Artemisia siberi*

ADF

*anova*

*rosmarinus*

ME,DMD

ME	%DMD	%ADF	%CP	
/ ± / b,c	/ ± / c,d	/ ± / a,b	/ ± / a,b,c	<i>Plantago lavendolata</i>
/ ± / a	/ ± / a	/ ± / d,e	/ ± / a	<i>Achillea berberstini</i>
/ ± / b,c	/ ± / c,d	/ ± / e,f	/ ± / d,e	<i>Secale montanum</i>
/ ± / a	/ ± / a,b	/ ± / f	/ ± / b,c,d	<i>Eurotia ceratoides</i>
/ ± / b,c	/ ± / c,d	/ ± / b,c	/ ± / b,c,d	<i>Medicago sativa</i>
/ ± / e	/ ± / f	/ ± / a	/ ± / e,f	<i>Agropyron elongatum</i>
/ ± / d,e	/ ± / e,f	/ ± / b,c,d	/ ± / e,f	<i>Festuca ovina</i>
/ ± / a,b	/ ± / b,c	/ ± / b,c,d	/ ± / a,b	<i>Salvia hypoleuca</i>
/ ± / d	/ ± / e,f	/ ± / b,c,d	/ ± / f	<i>Agropyron trichophorum</i>
/ ± / c,d	/ ± / d,e	/ ± / c,d,e	/ ± / c,d,e	<i>Agropyron pectiniformis</i>

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## Determination of animal unit and daily animal requirement for Sangsary sheep breed

H. Arzani<sup>\*1</sup>, A. Nikkhah<sup>2</sup>, H. Azarnivand<sup>3</sup>, Z. Jafarian Jelodar<sup>4</sup> and M. Ghorbani<sup>4</sup>

<sup>1</sup> Professor, Faculty of Natural Resources, University of Tehran, I. R. Iran

<sup>2</sup> Professor, Faculty of Agriculture, University of Tehran, I. R. Iran

<sup>3</sup> Associate Prof, Faculty of Natural Resources, University of Tehran, I. R. Iran

<sup>4</sup> Ph.D. student, Faculty of Natural Resources, University of Tehran, I. R. Iran

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### Abstract

More than 27 sheep breeds graze on Iran's rangelands. For estimation of grazing capacity in each region it is necessary to determine animal requirement based on forage quality and animal unit weight of dominant sheep breed. In present study animal unit weight of Sangsary breed was investigated. Two herds were selected. Fourty head animals including 15 three and 15 four years' old ewes, 5 three and 5 four years old rams were weighed in lowlands. Weight of animal unit was 36.98 kg and animal unit equivalent for rams, 6 and 3 month old lambs obtained 1.31, 0.64, 0.42 respectively. Two season winter and summer, sex of animals (ewes and rams) and two herds were significantly differed ( $p < 0.05$ ). For determination of forage quality 5 samples that each was made from 5 individual plants collected. Crude protein, acid detergent fiber, dry matter digestibility and metabolisable energy were estimated for 6 species from highland and 12 species from lowlands. According Tukey test forage quality significantly differed between species ( $p < 0.05$ ). This shows that animal requirement should be determined based on forage quality of available forage to animals. Requirement of animal grazing on rangeland is more than house keeping animals. So in this research considering environmental conditions and distances that animal had to walk everyday %50 was added to animal requirement calculated using either NRC tables or MAFF equation. The result showed that animal requirement in highland and lowland based on NRC tables were 1.00 and 1.04 kg and according to MAFF equation were 0.90 and 0.92 kg dry matter respectively.

**Keywords:** Range, Animal unit, Animal unit requirement, Forage quality