```
/
                              N.R.C.
                                            )
                                                         (P<0.01
                                                    //:
                                     //:
```

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```
( )NRC
                                                                                                                                                                              ) NRC
                                                                                                          ' - Stoddart et al.
' -Voisin
                                                                                                          -Alison
                                                                                                         '-Freer
<sup>^</sup> - Vallentine

<sup>a</sup> - Society for Range Management

· · -Khothman
                                                                                                          °-Cordova et al.
                                                                                                         -Cordova et al.

-National Research Council

-Scarrenchia & Gaskins
```

(C.I	P)			1
			1	
	:	1	1	
$C.P\% = 6.25 \times N^{\circ}$	%			
(AD.F)		Stipa	Bromus tomentelus	5
	()	1		barbata
ADF	(D.D.M)			
()		(N) Astrag	alus Astragalus adcer	ndens
		Scario		parrawwiamus
		Astrag		_
D.D.M%=83.580.824	ADF%+2.625N%	Aspho		
((M.E)	Aspitot	ietus	gossypinus albus
		C		aibus
()()		X		
$M.E(M_j/kg)=0.17$	D.D.M%-2			•
		Q ₁		
)				
			* /	
	AAN		•	
	.(
NRC				
				•
	.()			
_		(N)		
'-Crude Protein '- Acid Detergent Fiber				
' - Van Soiet				
* -Digestible Dry Matte *- Oddy et al.	er			
^v -Metabolic Energy	A : 1/	1 35 .		
[^] - Standing Committee	on Agriculture	' - Minin	nai Area	

```
(DMRT)
                    Bromus tomentellus
      Agropyron elongatum
        Bromus tomentellus
             Stipa barbata
       Scarop;a proemta;os
            Astragals spp.
             Poa bulbosa
         Eurotia ceratoides
       Agropyron elongatum
         Artemisia aucheri
  (A.D.F%)
                                                               (CV)
                          Poa bulbosa
        Astragalus spp
(D.D.M)
```

. | Astragalus spp | Poa bulbosa

			(M.j/kg)		
Bromus tomentellus	/	/		/	/
Stipa barbata	/	/		/	/
Scarop;a proemta;os	/	/	1	/	/
Astragals spp.	/	/		/	/
Poa bulbosa	/	/	1	/	/
Eurotia ceratoides	/	1	1	/	/
Agropyron elongatum	/		1	/	/
Artemisia aucheri	/		/	1	1

	()	Poo	Astragalı a bulbosa	us spp	I	
	. 1	Mj	1	<i>'</i> /	Astragalus sp	p
			Artemisi	a aucheri		
					1 1	
)				
					.(
1				N.R.C		
				/ Mj	kca	ıl
		1				
1				NRC		

(Mj/kg)	/	/	/	/	/	/	/	/	/
(gr/kg)	/	/	/	/	/	/	/	/	/

FS	MS		(SS)	
	/		/	
/ **	/		/	
			/	
		P<0.01		(D.M.R.T)

(kg)	(kg)	(kg)
/ ±/ ^c	/ ± / b	/ ±/ a

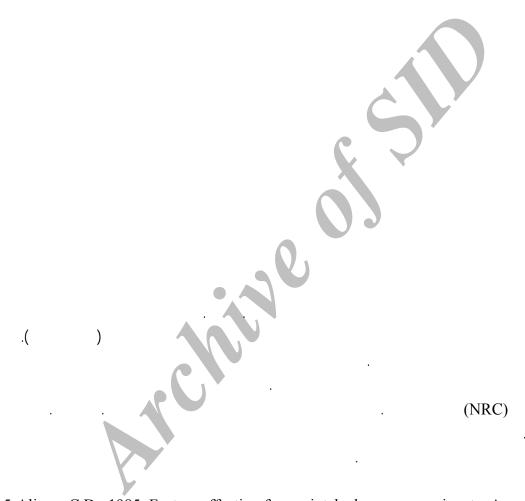
__ a,b,c

() () () () () () () () .() .() () () () .() - Nelson & Moser
- Arnold & Dudzinski
- Low & Andrews
- Ranjhan
- Khalil et al.
- Garza & Fulbright -Rhodes & Sharrow
-Cook et al.
-Scarrenchia & Gaskins
-Wallace

(() NRC

)

^{&#}x27;'- Yong & Corbett
''-Havstad



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Necessity of Determining Animal Unit Requirement Based on the Quality of Forage

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Abstract

Animal unit requirement is calculated 1.5-2 Kg dry forage for each day in grazing capacity estimation, but forage quality differs from one plant to another, region to region, and in different growth periods. Thus, calculation of animal unit requirement based on forage quality will be a more reliable indicator than using 1.5-2 kg dry mater when estimating grazing capacity. Animal unit body weight of the Lori-Bakhtiari sheep was determined to be about 50 kg. Animal unit requirement in maintenance condition and grazing in rangelands (0.6 times of keeping in a stable) was extracted from NRC tables based on crude protein (152 gr.), metabolic energy (13.4 mJ) and 2 percent body weight forage (1.6kg). Forage quality was measured for nine vegetation types in the region. With consideration of animal requirement and vegetation composition of each vegetation type, forage quantity that supplied metabolic energy, crude protein, and 2 percent body weight dry mater was calculated in maintenance condition and grazing in rangelands. Using completely randomized design with 3 treatments and 9 replicates for each treatment, statistical comparison of forage quality that provided animal requirement showed significant differences (P<0.01). These results showed the necessity of calculating animal unit requirement based on forage quality in different regions and conditions.

Keywords: Rangelands, Animal unit requirement, Animal unit, Forage quality.

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