

(*Acomys dimidiatus* Cretzschmar, 1826)

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Murinae

Acomys

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Acomys dimidiatus :

(Lay, 1967; Etemad, 1978)

Karami,)

(1993

(Ziaei, 2008)

(Khajeh, 2002)

(PCA²)

(Adkins *et al.*, 2001)

(Chang & Corlett, 2006)

Acomys Geoffroy, 1838

Spiny mice

Duff &) Murinae

(Lawson, 2004

(Etemad, 1978)

Acomys

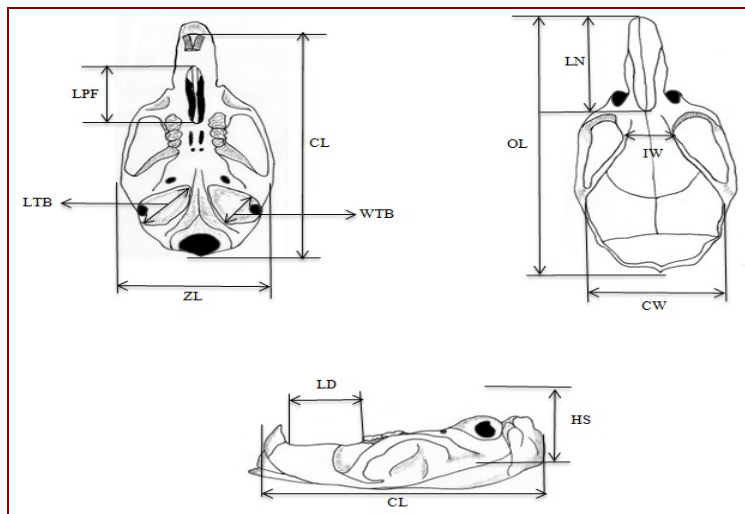
(Bohnnomme *et al.*, 1985)

² Principle Component Analysis

¹ Muridae

1978

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Occipitonasal Length	OL
Condylbasal Length	CL
Zygomatic Length	ZL
Infer orbital Width	IW
Cranial Width	CW
Length of Nasal	LN
Length of Diastema	LD
Length of anterior Palatine foramina	LPF
Width of tympanic bullae	LTB
Upper cheek teeth	UCH
Lower cheek teeth	LCH
Height of skull	Hs
Width of rostrum	WR
Length of Mandible	LM
Width of tympanic bullae	WTB

(Burdenski, 2000) Kurtosis Skewness

(PCA)

(Rostami, 2006)

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PCA

KMO (Kaiser-Meyer-Olkin)

(Daiz, 2006)

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PCA

Kalantari,)

³ Ward
⁴ Tukey test

ade-4

(Thioulouse *et al.*, 1997)

SPSS 16

()

/ KMO

($P=0.00$)

PCA

(%)

()

()

PCA

(UCH)

(LCH)

(LPF)

(CW)

(LN)

(LPF)

(WTB)

(LTB)

(WR)

(HS)

)

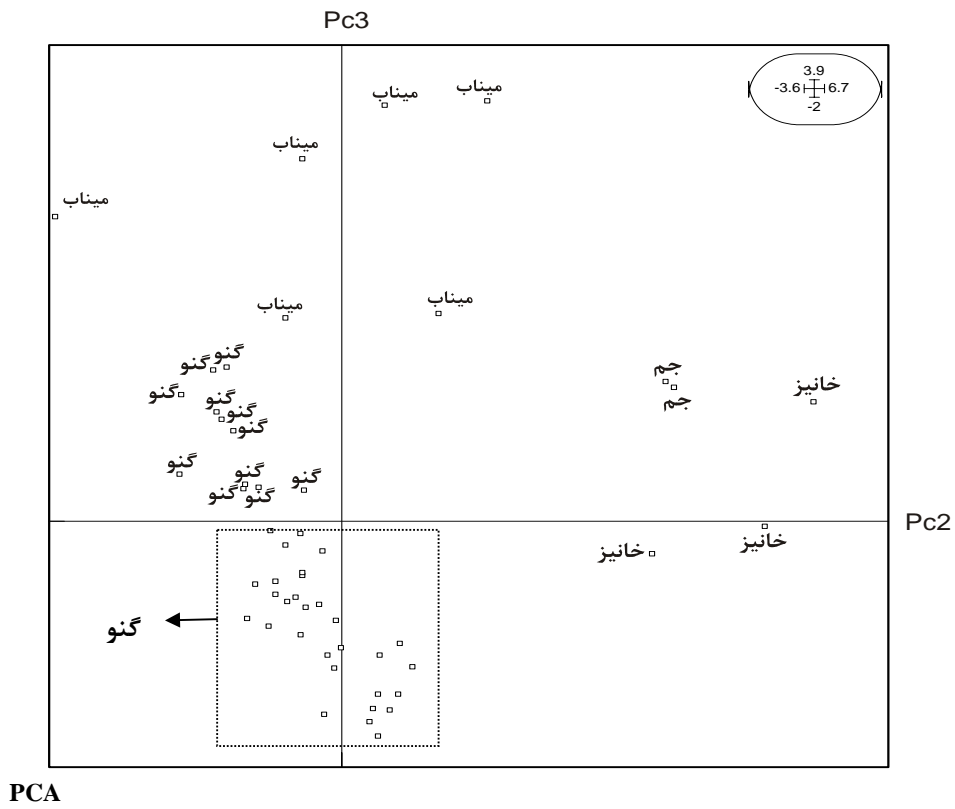
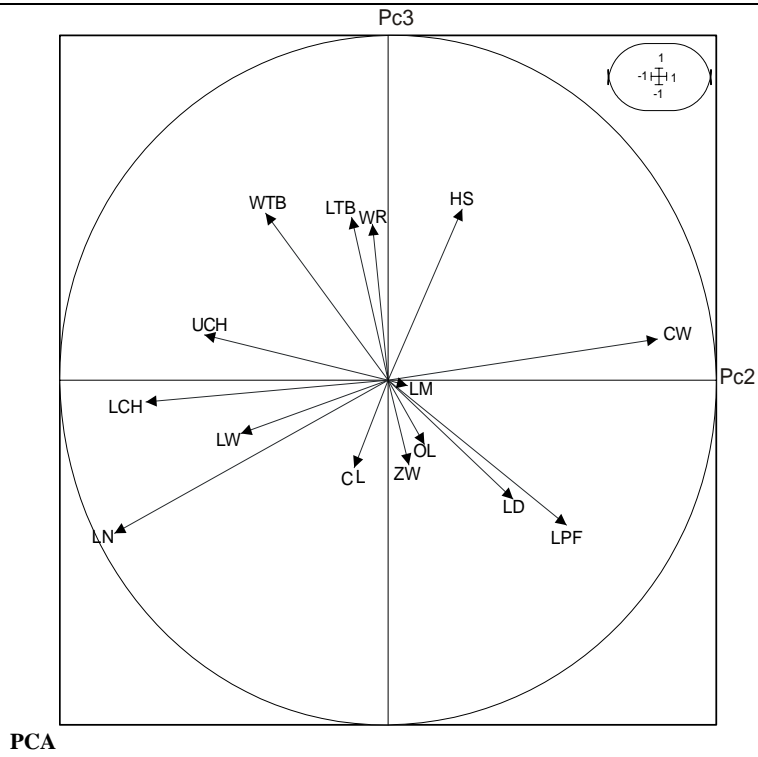
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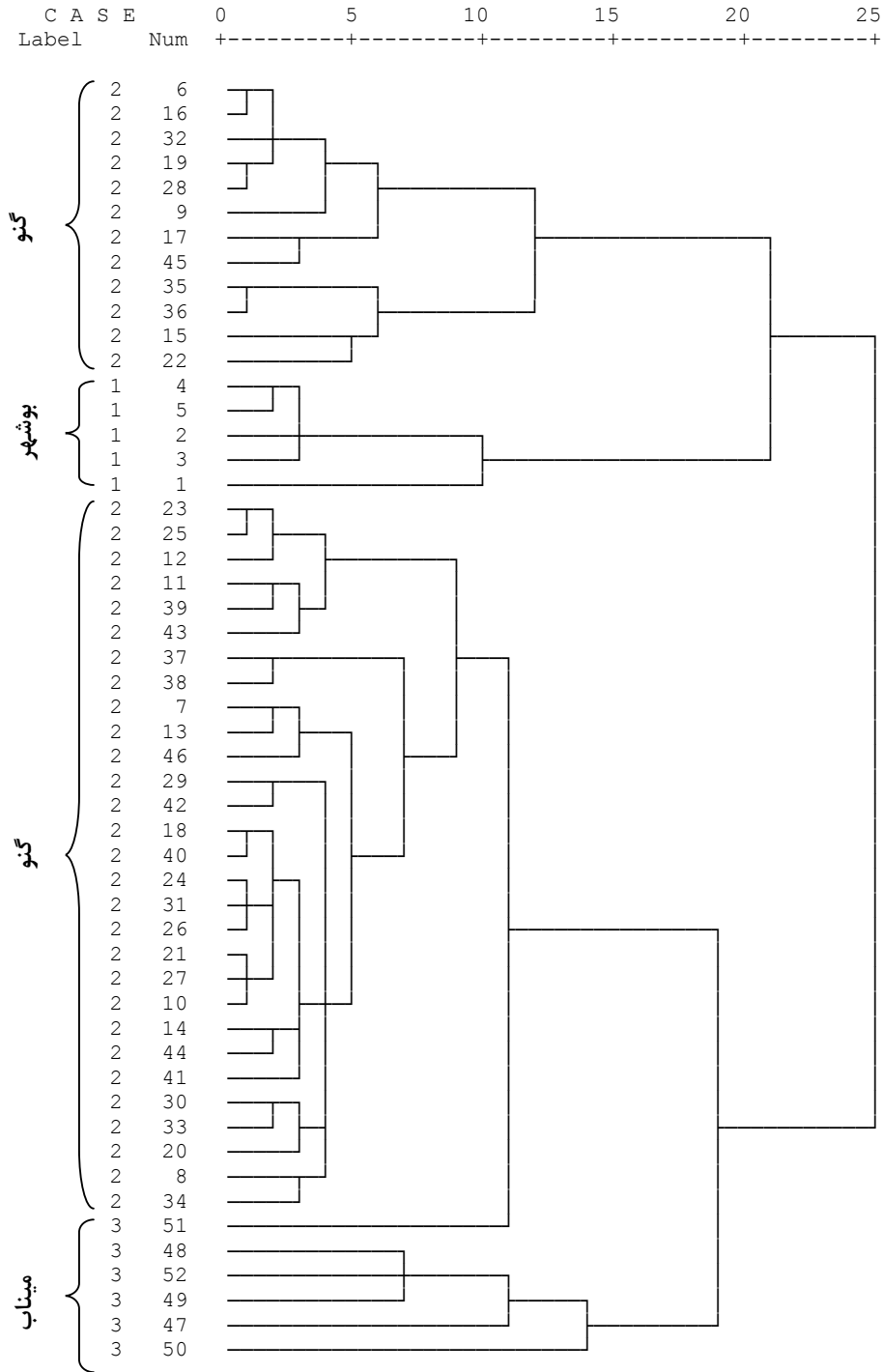
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Ward

		PCA		
		Factor loading		
		F1	F2	F3
Eigenvalue		/	/	/
Factor loading	OL	/	/	/
	CL	/	/	/
	ZL	/	/	/
	IW	/	/	/
	CW	/	/	/
	LN	/	/	/
	LD	/	/	/
	LPF	/	/	/
	LTB	/	/	/
	WTB	/	/	/
	UCH	/	/	/
	LCH	/	/	/
	HS	/	/	/
	WR	/	/	/
	LM	/	/	/



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(:3 :2 :1)

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(Case, 1978; Melton, 1982)

Acomys

(ANCOVA PCA, DFA)

(Frynta *et al.*, 2007)

Shargal

(2000)

mt DNA

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Taxonomic Study of Populations of Eastern Spiny Mouse (*Acomys dimidiatus* Cretzschmar, 1826) (Rodentia:Muridae)

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Abstract

Genus *Acomys* comprising 14 species from mouse like rodents and substituted in Murinae subfamily. The aim of this research was surveying external, cranial and dental character differences among diverse populations of *Acomys dimidiatus* in Minab, Boushehr and Geno biosphere reserve. Sampling was performed during summer 2003 and 2005. Total of 52 species were collected from mentioned sites. The results of ANOVA revealed a significant differences of all characters between study areas except Length of Diastema and Length of anterior Palatine foramina. Analysis of PCA showed Khaeez and Jam samples (Boushehr region) was stand in separated group and had a positive relationship with second axis. These samples were similar by Cranial Width. Minab samples had an optimistic association with Occipitonasal Length, Condylbasal Length, Zygomatic Length and Length of Mandible. Some of Geno samples were similar to Minab samples but others were disparted because of negative relationship with Occipitonasal Length, Condylbasal Length, Zygomatic Length and LM characters. Comparisons of cranial characteristics revealed importance of Occipitonasal Length and Condylbasal Length to distinct populations. Our results suggested mentioned morphometric characters as a good index to separate individuals from different areas.

Keywords: *Acomys dimidiatus*, Cranial characters, Taxonomy, Geno biosphere reserve, Minab, Boushehr.