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type.>*Artemisia* type> >*Aneurolepidium* type>
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Halocnemum

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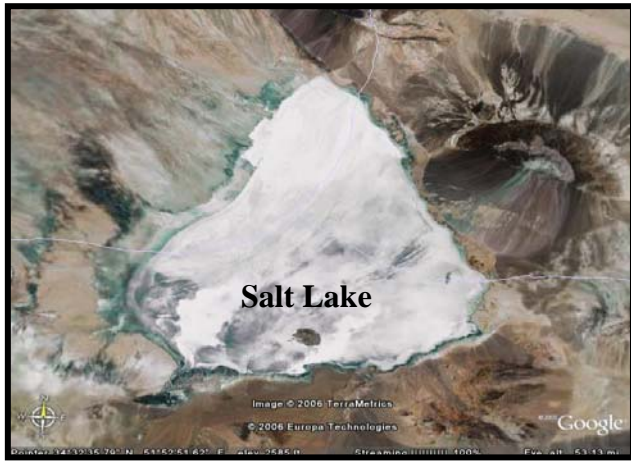
strobilaceum

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Tamarix sp.	TA	/		/	/	/	/	/	/	/	
Seidlitzia rosmarinus	SE		/	/	/		/	/	/	/	/
Seidlitzia rosmarinus- Nitraria schoberi	SE-NI			/	/	/		/	/	/	
Nitraria schoberi	NI			/	/		/	/	/		
Alahgi camelurum- Nitraria schoberi	AL-NI	/	/	/	/			/	/		
Alahgi camelurum	AL	/	/	/	/	/	/	/	/		

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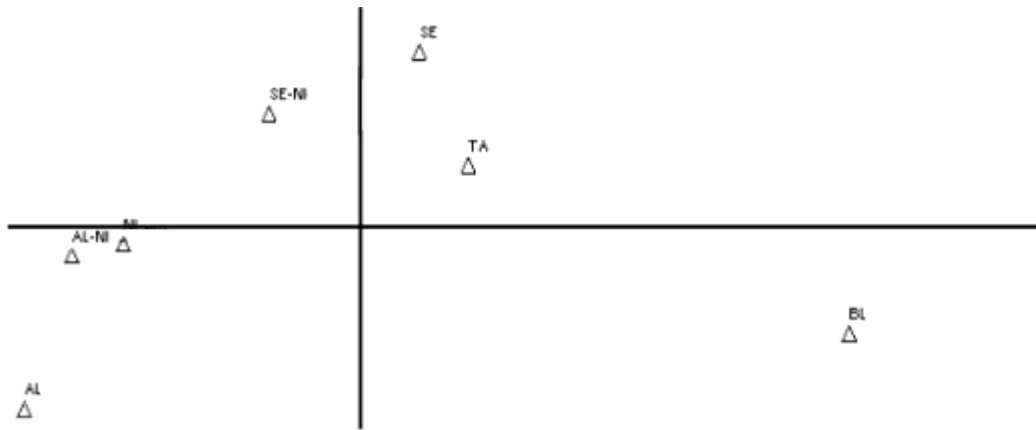
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Tamarix Seidlitzia rosmarinus () ()
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Tamarix sp.

Seidlitzia rosmarinus

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BL (Bare lands)

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PCA Tamarix sp. ,Alahgi Tamarix sp. , Seidlitzia rosmarinus)
(Nitraria schoberi camelurum

Alahgi

camelurum

Tamarix sp. Nitraria Seidlitzia rosmarinus Tamarix sp.
(schoberi

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camelurum

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Seidlitzia rosmarinus
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Alahgi camelurum

Alahgi camelurum
Seidlitzia rosmarinus
Nitraria schoberi , Tamarix sp.

Tamarix sp.

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Seidlitzia

Nitraria schoberi

rosmarinus

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PCA

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Alahgi camelurum

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Investigation of efficient environmental factors on plant establishment and extension by multivariate analysis (Case study: Southern wet region of Daryacheh Namak, Kashan)

Gh. R. Zehtabian^{*1}, M. K. Kianian² and A. Salehpour Jam³

¹ Professor, Faculty of Natural resources, University of Tehran, I. R. Iran

² Graduate student, Faculty of Natural resources, University of Tehran, I. R. Iran

³ Graduate student, Faculty of Natural resources, University of Tehran, I. R. Iran

(Received: 02 December 2006, Accepted: 25 May 2008)

Abstract

With the aim of soil resources conservation, knowing plant halophyte types compatibility mechanisms is necessary and the main aim is identification of present relationship of plant communities and introducing beneficial variates for rehabilitating of this lands. Investigation of relationship between plants for each region with soil factors is necessary. Because this method will recognize relationship between different environmental factors with plants. Thus, present relationship were investigated in playa wet region of southern Kashan's Daryacheh Namak. First, plant types were recognized by aerial photographs and field works. Finally, 7 plant types were recognized. Then, sampling from the plant types were done. Chemical and physical factors such as EC, Gypsum, soluted cations and anions, organic matter, CaCO₃ %, etc, were measured from depths of 0-30 and 30-60 cm. Then for finding relationship between plant types and environmental factors (soil factors, water table, rainfall, temperature, relative humidity and altitude) were used based on PCA method. The results showed that strong relations are established between plant types and these factors. Environmental factors have influence on establishment and extension of the plants and most important factors on detachment of plants communities were soil properties (EC, SAR, CO₃, gypsum content) and water table.

Keywords: Multivariate analysis, Plant and environmental factors relations, Kashan playa, PCA