

Studying the floristic composition of Dehbid Khorrami area in Iran**Ali Akbar Tajali***Department of Agriculture, Shahre Rey branch, Islamic Azad University, Tehran, Iran*

Ali Akbar Tajali: Studying the floristic composition of Dehbid Khorrami area in Iran

ABSTRACT

The region studied had an area of 30000 hectares and was located adjacent to Dehbid Khorrami in the catchment of Sivand dam in Fars province- Iran. A total of 67 species were recorded with 16 families and 55 genera. Most distribution families with respect to species number in the study area were: Poaceae (22), Fabaceae (10), Asteraceae (9), Lamiaceae (5), Brassicaceae (4), Papaveraceae (3), Chenopodiaceae (2), Euphorbiaceae (2), Rosacea (2), Umbeliferae (2), Convolvulaceae (1), Malvaceae (1), Plantaginaceae (1), Rubiaceae (1), Scrophulariaceae (1), Zygophyllaceae (1).

Key words:**Introduction**

Iran has various regions in terms of geographical location and this led it to have a lot of plant diversity. This rich flora includes a valuable species in terms of forage and pharmaceutical and industrial. Since for reasons such as over-exploitation of plants and development of industry, some of these plants are endangered. Therefore it is necessary that the flora of each region is well recognized. It should also be noted that floristic survey of any region is considered as a plant identification of that region. The region studied had an area of 30000 hectares and was located adjacent to Dehbid Khorrami in the catchment of Sivand dam in Fars province and at a distance of 185 km from the north of Shiraz. The minimum altitude in the region studied is 2038.5 m and the maximum is 3842.5 m and about half of the region is at an altitude over 2400 meters and maximum area of the region includes about 2400-3200 m with an area about 25.4% of the total area. The annual average rainfall is 143.4 mm. studying the monthly rainfall distribution of stations shows that the rainfall continues from November to May and about 5 month of the year from June to October, the rainfall rarely occurs. The coldest month of the

year is January with 2.9 °C and the hottest month of the year is July with 25.7 °C temperature.

Materials and Methods

The study area thoroughly surveyed during may 2011- August 2011 for the purpose of collection of plant specimen. Plant specimens were processed and dried for further identification. All specimens were identified with help of flora Iranica Rechinger(1963-2005), Ghahreman(1978-1994) and Mozaffarian (2007)Voucher specimen is identified and deposited in the herbarium of Islamic Azad University Share Rey branch (Table1).

Results and Discussion

A total of 67 species were recorded with 16 families and 55 genera (Fig 1). Most distribution families with respect to species number in the study area were: Poaceae (22), Fabaceae (10), Asteraceae (9), Lamiaceae (5), Brassicaceae (4), Papaveraceae (3), Chenopodiaceae (2), Euphorbiaceae (2), Rosacea (2), Umbeliferae (2), Convolvulaceae (1), Malvaceae (1), Plantaginaceae (1), Rubiaceae (1), Scrophulariaceae (1), Zygophyllaceae (1).

Table1: Plant floristic composition of Sivand area (Abbreviations: SH= Shrub, T= Tree, H= Herb, P= Perennial, A= Annual, B= Biennial, PC = Palatability class for livestock, I = High palatability, II = Fair palatability, III = pour palatability)

Family	Name of Plant Species	Status	Duration	PC
Asteraceae:				
	<i>Artemisia aucheri</i> Boiss.	SH	P	III
	<i>Cousinia crispa</i> Jaub.&Spach	H	P	III
	<i>Lactuca orientalis</i> Boissier	H	P	III
	<i>Echinops ritro</i> Bunge.	H	P	III
	<i>Cirsium arvelse</i> L.	H	P	III
	<i>Onopordon acanthium</i> L.	H	P	III
	<i>Pulicaria dysenterica</i> L.	H	P	II

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	<i>Senesio vulgaris</i> L.	H	P	III
	<i>Sophora alopecuroides</i> L.	H	P	III
Brassicaceae:	<i>Erysimum crassipes</i> Fisch.& Mey	H	P	III
	<i>Alyssum murale</i> Waldstein & Kitaibel	H	P	III
	<i>Moriera spinosa</i> Boiss.	H	P	II
	<i>Fibigia umbellate</i> Boiss.	H	P	III
Chenopodiaceae:	<i>Noea mucronata</i> L.	H	P	III
	<i>Ceratocarpus arenarius</i> L.	H	A	III
Convolvulaceae:	<i>Covolvulus lineatus</i> L.	H	P	III
Euphorbiaceae:	<i>Euphorbia seguieriana</i> Neck.	H	P	III
	<i>Euphorbia virgata</i> Waldst & Kit.	H	P	III
Fabaceae:	<i>Astragalus adscendens</i> Boiss. & Hausskn.	S H	P	III
	<i>Astragalus arbusculinus</i> Bornm.&Gaub.	S H	P	III
	<i>Astragalus aureus</i> Willd.	S H	P	III
	<i>Astragalus glycyphyllus</i> L.	S H	P	III
	<i>Astragalus odoratus</i> Lam.	S H	P	III
	<i>Alhagi camelorum</i> Fisch.	S H	P	III
	<i>Glycyrrhiza glabra</i> L.	H	P	III
	<i>Melilotus officinalis</i> L.	H	B	III
	<i>Ononis spinosa</i> L.	H	P	III
	<i>Onobrychis cornuta</i> L.	H	P	I
Lamiaceae:	<i>Nepeta daenensis</i> Boiss.	H	P	III
	<i>Phlomis persica</i> Boiss.	H	P	III
	<i>Salvia nemorosa</i> L.	H	P	III
	<i>Stachys acerosa</i> Boiss.	H	P	III
	<i>Ziziphora tenuior</i> L.	H	P	II
Malvaceae:	<i>Malva neglecta</i> Wallr.	H	P	III
Papaveraceae:	<i>Papaver arenarium</i> M.B.	H	A	III
	<i>Papaver lacerum</i> Popov.	H	A	III
	<i>Papaver tenuifolium</i> Boiss.&Hohen.	H	A	III
Plantaginaceae:	<i>Plantago lanceolata</i> L.	H	A	III
Poaceae:	<i>Agropyron trichophorum</i> (Link)	H	P	I
	<i>Agropyron caespitosum</i> C. Koch	H	P	I
	<i>Aeloropus littoralis</i> (Gouan)Parl	H	P	II
	<i>Alopecurus apiatus</i> Ovcz.	H	P	II
	<i>Avena fatua</i> L.	H	A	II
	<i>Bromus tomentelus</i> Boiss.	H	P	I
	<i>Bromus dantheniae</i> Trin.	H	A	II
	<i>Crypsis alopecuroides</i> Piller & Mitterp.	H	A	III
	<i>Cynodon dactylon</i> L.	H	P	II
	<i>Dactylis glomerata</i> L.	H	P	I
	<i>Erempyrus distans</i> C.Koch	H	A	II
	<i>Festuca aurandinaceae</i> Schreb.	H	P	I
	<i>Hordeum bulbosum</i> L.	H	P	III
	<i>Hordeum violaceum</i> Boiss.et Huet	H	P	II
	<i>Hordeum morinum</i> Hudson.	H	A	III
	<i>Heterantherium piliferum</i> Banks&Soland.	H	A	II
	<i>Lolium prene</i> L.	H	P	I
	<i>Melica persica</i> Kunth.	H	P	II
	<i>Oryzopsis holciormis</i> (M.B.)Hack	H	P	II
	<i>Poa bulbosa</i> L.	H	P	III
	<i>Secale montanum</i> Guss.	H	P	I
	<i>Stipa barbata</i> Desf.	H	P	I
Rosaceae:	<i>Amygdalus erioclada</i> Bornm.	T	P	-
	<i>Amygdalus lycioides</i> Spach.	T	P	-
Rubiaceae:	<i>Gallium aparine</i> L.	H	A	III
Scrophulariaceae:	<i>Verbascum orientale</i> L.	H	P	III
Umbeliferae:	<i>Echinophora sibthorpiana</i> Guss.	H	P	III
	<i>Eryngium bungei</i> Boiss.	H	P	III
Zygophylaceae:	<i>Peganum harmala</i> L.	H	P	III

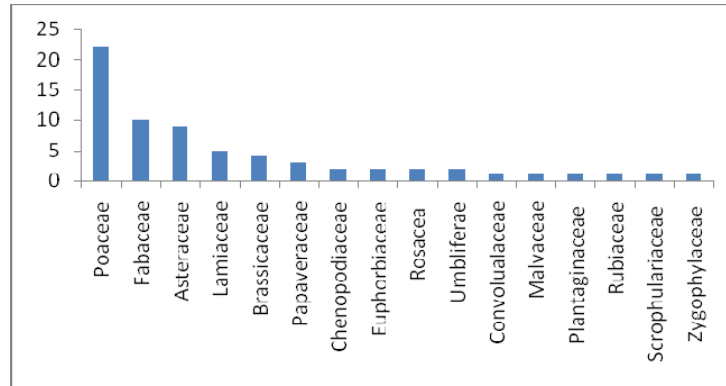


Fig. 1: Number of species in each family

A detailed description of flora of the study area is given in table 2 which comprises of detailed account of species with their families, status (Herb, Shrub, Tree), Duration (Annual, Biennial, Perennial) and palatability class for livestock (class I = High palatability, class II = Fair palatability, class III = poor palatability). Among these, 54 species were recorded as perennial whereas 12 species were annual and only 1 species was biennial. Also 58 species were herbs, 7 shrubs and 2 species were

recorded as trees (Fig 2). From point of view of plant palatability 14%, 20% and 66% of species were in high, fair and poor palatability class in rank that show destroying the natural vegetation and poor condition of ecosystem resulting over grazing and the lack of cultivated forage species for livestock and changing the natural pastures to cultivated land arising of population increase and industry development.

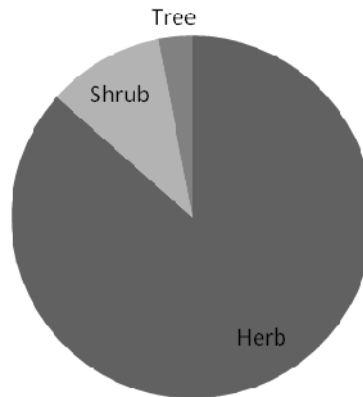


Fig. 2: Species categorized on the basis of status

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