

A SHORT SURVEY OF HORMOZGAN PROVINCE VEGETATION (IRAN)

by

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The Hormozgan province with an area of ca. 66780 square kilometers is located in the South Iran, bordered from North by Fars, Kerman and Sistan and Baluchestan provinces, from South by the Persian Gulf and Oman Sea, from East by Sistan and Baluchestan provinces and from West by Buhsher and Fars provinces.

TOPOGRAPHY

The highest mountains of the province are Kuh-e Hemag located at the N. of Bandar-Abbas and S.E. of Hajiabad with the altitude of 3267 m from sea level, Kuh-e Shab near Bastak and Lar with the altitude about 2681 from sea level and Kuh-e Genu just N. of Bandar-Abbas, with the altitude about 2347 m. Besides, there are many mountain ridges from West to East which are the continuation of Zagros mountains. The lowest parts of the province are the Sea coastal plains. The Sea coastal border has a length of about 1200 km. The province includes 13 big and small Islands: Jazir-e Ghesm (the largest one), Tounb-e Bozorg and Kuchek, Kish Abounou-sa and Hormoz at the mouth of Oman sea and Persian Gulf.

CLIMATE

The most part of the province is a Subtropic region. The average of annual precipitation is about 160 mm; the annual rainfall is more than 200 mm for three years in every ten years period. Most of the time the rain starts as occasional showers and quickly runs off, so it is not very useful for the vegetation growth.

From the climatological point of view the province can be divided into three characteristic regions: Coastal area, subtropical steppe region including foothills, and high mountains region.

According to the opinion of the phytogeographers (EIG) the province belongs to Saharo-Sindian territory.

Maximum temperature degree is about 40-46°C per year and minimum about 9-11°C, but in the northern part of the province sometime it reaches to 1°C. The winters are short, mild and frost free, the summers are long, dry and hot.

RIVERS

There are many rivers in the province but most of them are seasonal, having salty water; only Minab river is permanent with fresh water, which is used by people of Bandar-Abbas and Minab for drinking and irrigation of farms and gardens.

Some other big seasonal rivers are Hasan langi and Jallabi (between Minab and Bandar-Abba), Gabrik and Jagin (between Bander-e Jask and Chahbahar).

SOILS

All Coastal parts of the province have sandy formation with alluvial saline soil and wet saline and alkaline soils. The plateau soils are sierozem together with Rigosoul.

GEOLOGY

Oldest formations belong to Cambrian with fifty salty domes, most part of the high lands belong to Neozoic, alluvial quaternary are spread everywhere in the plain.

VEGETATION

Because of the various climatic conditions (average of rainfalls, temperature degree, topographic condition) the province has a very rich flora. From physiognomical criteria, vegetation in Hormozgan province belong to the subtropical type, and is dominated by pea family (Leguminosae) and grass family (Gramineae). Therefore one can see at least one or two species of these families every where.

In the autumn goose foot family (Chenopodiaceae) is dominant and at most places you can see *Hammada salicornica* besides of other species of this family. Although sunflower family (Compositae) covers a high percentage of the vegetation (in number and species variation) it is not domi-

nant, nevertheless in some parts of the province (foot hills with low altitude) *Platychaete glaucescens* has high density.

Hormozgan province is divided into five parts based on physiognomical, ecological and florestic criteria as follows:

1. Mangrove forests.
2. Vegetation of coastal dunes and low altitude borders.
3. Vegetation of the vast plains and foot hills.
4. The vegetation of the halophytic communities and salty places.
5. Plant formations of the mountain regions.

At the end besides to plant species of the provinces exotic horticultural and ornamental species are listed.

1. MANGROVE FORESTS

The Mangrove forests consists mainly of one species *Avicennia marina* on coastal area near Bandar-e Jask, Tyab, Pol, Khamir, Jazir-e Ghesheh mixed with some *Rhizophora mucronata* at the Bandar-e Sirik.

This is rather pure stand without any inferior stratum of vegetation. Only at the Bandar-e Khamir and Tyab one can see rarely wet saline and alkaline plants, *Malocnemum stroesei*, *Salicornia* ssp., *Salsola* ssp., *Suaeda* sp., which have a special tolerance against the highwater tables.

2. VEGETATION OF COASTAL DUNES AND LOW ALTITUDE BORDERS

This vegetation depends directly on the influence of the humidity of the sea water, and is usually extending up to 700 m from sea level. It is a rich vegetation consisting of *Pennisetum divisium*, *Panicum turgidum* communities and other plants as follows:

Aerva javanica
Aizoon canariensis
Aristida adscensionis
Arnebia decumbens
Arnebia fimbriopetala
Asphodelus tenuifolius
Astragalus (Ammodendron) sp.
Astragalus spp. (annual)
Brassica tournefortii
Calligonum spp.
Calotropis procera

Fagonia bruguieri
Fagonia sp.
Halopyrum mucronatum
Heliotropium bacciferum
Indigofera intricata
Indigofera pauciflora
Lotus garcini
Lotus halophilus
Moltkiopsis ciliata
Neurada procumbens
Ochradenus baccatus

<i>Citrullus colocynthis</i>	<i>Plantago coronopus</i>
<i>Crotalaria furfuracea</i>	<i>Plantago ovata</i>
<i>Cyperus conglomeratus</i>	<i>Rhynchosia schimperi</i>
<i>Dactyloctenium scindicum</i>	<i>Salvadora persica</i>
<i>Dipterygium glaucum</i>	<i>Sphaerocoma aucheri</i>
<i>Ducrosia anethifolia</i>	<i>Tavernieria cuneifolia</i>
<i>Eleusine compressa</i>	<i>Tavernieria spartea</i>
<i>Emex spinosa</i>	<i>Tephrosia persica</i>
<i>Eragrostis cilianensis</i>	<i>Tragus racemosus</i>
<i>Euphorbia cheirolepidioides</i>	<i>Trianthema portulacastrum</i>

3. VEGETATION OF THE VAST PLAINS AND FOOT HILLS

An area with very rich vegetation which forms the biggest part of the province containing:

- Wood land stands between Minab and Bandar-e Jask with the following trees and shrubs:

<i>Acacia nilotica</i>	<i>Lycium sp.</i>
<i>Acacia nubica</i>	<i>Ochradenus baccatus</i>
<i>Calotropis procera</i>	<i>Prosopis spicigera</i>
<i>Commicarpus stenocarpus</i>	<i>Salvadora persica</i>
<i>Hammada salicornica</i>	<i>Tavernieria glabra</i>
<i>Lycium shawii</i>	<i>Ziziphus spina-christi</i>

- Rather pure community of *Capparis decidua*, *Prosopis spicigera* between Bandar-e Jask and Konarak together with

<i>Acacia farnesian</i>	<i>Tavernieria spartea</i>
<i>Acacia nubica</i>	<i>Tavernieria cuneifolia</i>
<i>Salvadora persica</i>	<i>Tephrosia persica</i>
<i>Tamarix spp.</i>	

- Pseudosavanna communities in the coastal area of Persian Gulf between Bandar-e Lenge, Charak and Jazier-e Gheshe occupied by:

<i>Acacia ehrenbergiana</i>	<i>Lotus garcini</i>
<i>Acacia nilotica</i>	<i>Ochradenus baccatus</i>
<i>Acacia nubica</i>	<i>Panicum turgidum</i>
<i>Acacia tortilis</i>	<i>Pennisetum divisum</i>
<i>Aristida adscensionis</i>	<i>Salsola baryosma</i>
<i>Calotropis procera</i>	<i>Salsola spp.</i>
<i>Cenchrus pennisetiformis</i>	<i>Sporobolus arabicus</i>
<i>Chrysopogon aucheri</i>	<i>Stipagrostis plumosa</i>
<i>Cymbopogon olivieri</i>	<i>Tavernieria cuneifolia</i>
<i>Convolvulus virgatus</i>	<i>Tavernieria spartea</i>
<i>Convolvulus leptocladus</i>	<i>Ziziphus spina-christi</i>
<i>Eremopogon foveolatus</i>	<i>Zygophyllum eurypterum</i>
<i>Grewia tenax</i>	<i>Zygophyllum propinquum</i>
<i>Indigofera intricata</i>	

Together with many annual plant form pea and grass families.

- Rather pure stand of *Euphorbia larica* around Bandar-e Khamir together with:

<i>Acacia farnesiana</i>	<i>Helianthemum lippii</i>
<i>Acacia nubica</i>	<i>Hyparrhenia hirta</i>
<i>Argyrolobium roseum</i>	<i>Indigofera intricata</i>
<i>Cenchrus pennisetiformis</i>	<i>Ochradenus baccatus</i>
<i>Chrysopogon aucheri</i>	<i>Pergularia tomentosa</i>
<i>Convolvulus leptocladus</i>	<i>Platychaete glaucescens</i>
<i>Convolvulus virgatus</i>	<i>Salvia aegyptiaca</i>
<i>Cymbopogon olivieri</i>	<i>Salvia macilenta</i>
<i>Eremopogon foveolatus</i>	<i>Sporobolus arabicus</i>
<i>Pagonia</i> spp.	<i>Taverniera cuneifolia</i>
<i>Farsetia heliophila</i>	<i>Taverniera spartea</i>
<i>Gaillonia aucheri</i>	<i>Zygophyllum eurypterum</i>
<i>Gymnocarpus</i>	<i>Zygophyllum propinquum</i>
<i>Hammada salicornica</i>	

- River bed trees and shrubs consisting:

<i>Nerium indicum</i>	<i>Tamarix</i> spp.
<i>Rharia stricta</i>	<i>Ziziphus spina-christii</i>
<i>Prosopis spicigera</i>	

- Shrub land stands between Rudan and Kahnij consisting:

<i>Aerva javanica</i>	<i>Haloxylon amodendron</i>
<i>Calligonum</i> spp.	<i>Hammada salicornica</i>
<i>Cornulaca monacantha</i>	<i>Pycnocycla aucherana</i>
<i>Gaillonia aucheri</i>	

Because of being very rich and vast, plant species of the region are reviewed and listed in alphabetical order.

- Rather dominant trees and shrubs and shrublets of the region are:

<i>Abutilon fruticosum</i>	<i>Linaria macilenta</i>
<i>Acacia ehrenbergiana</i>	<i>Lycium shawii</i>
<i>Acacia nilotica</i>	<i>Lycium</i> sp.
<i>Acacia numidica</i>	<i>Nannorrhops ritchiana</i>
<i>Acacia tortilis</i>	<i>Nerium indicum</i>
<i>Aerva javanica</i>	<i>Ochradenus aucheri</i>
<i>Amygdalus lycioides</i>	<i>Ochradenus baccatus</i>
<i>Amygdalus scoparia</i>	<i>Oldenlandica retrosa</i>
<i>Anvillea garcini</i>	<i>Olea ferrugina</i>
<i>Calligonum</i> spp.	<i>Pergularia tomentosa</i>
<i>Calotropis procera</i>	<i>Periploca aphylla</i>
<i>Capparis cartilaginea</i>	<i>Pistacia khinjuk</i>
<i>Capparis decidua</i>	<i>Platychaete aucheri</i>
<i>Capparis spinosa</i>	<i>Platychaete glaucescens</i>
var. <i>mucronifolia</i>	<i>Populus euphratica</i>

<i>Cassia italica</i>	<i>Prosopis farcta</i>
<i>Chrozophora obliqua</i>	<i>Prosopis spicigera</i>
<i>Cocculus pendulus</i>	<i>Pteropryum aucheri</i>
<i>Cotoneaster rechingeri</i>	<i>Pycnocycla aucherana</i>
<i>Dodonea viscosa</i>	<i>Pycnocycla bashagardiana</i>
<i>Ephedra foliata</i>	<i>Pycnocycla nodosa</i>
<i>Euphorbia larica</i>	<i>Rhazia stricta</i>
<i>Ficus bengalensis</i>	<i>Rynchosia schimperii</i>
<i>Ficus carica</i>	<i>Sageretia thea</i>
<i>Fortuynia garcini</i>	<i>Salvadora persica</i>
<i>Gaillonia aucheri</i>	<i>Tamarix aphylla</i>
<i>Grewia tenax</i>	<i>Tamarix spp.</i>
<i>Gynocarpus decander</i>	<i>Taverniera cuneifolia</i>
<i>Haloxyton ammodendron</i>	<i>Taverniera spartea</i>
<i>Hammada salicornica</i>	<i>Tecomella undulata</i>
<i>Helianthemum lippii</i>	<i>Tephrosia persica</i>
<i>Hibiscus micranthus</i>	<i>Vitex negundo</i>
<i>Indigofera paucifolia</i>	<i>Zataria multiflora</i>
<i>Indigofera intricata</i>	<i>Zygophyllum eurypterum</i>
<i>Leptadenia pyrotechnica</i>	

- Other annual and perennial plant of the region are:

<i>Abutilon muticum</i>	<i>Limonium iranicum</i>
<i>Acantholimon scorpiurus</i>	<i>Linaria macilentia</i>
<i>Acanthophyllum bracteatum</i>	<i>Linum strictum</i>
<i>Aegopordon berardioides</i>	<i>Lotonomis platycarpus</i>
<i>Aeluropus lagopoides</i>	<i>Lotus angustissimus</i>
<i>Aeluropus littoralis</i>	<i>Lotus laricus</i>
<i>Allium spp.</i>	<i>Lotus garcini</i>
<i>Amni majus</i>	<i>Lotus halophilus</i>
<i>Anastatica hierochuntica</i>	<i>Lotus schimperii</i>
<i>Andrachne telephioides</i>	<i>Matthiola longipetala</i>
<i>Anticharis glutinosa</i>	<i>Medicago laciniata</i>
<i>Antirrhinum orontium</i>	<i>Medicago minima</i>
<i>Aphanopleura leptoclada</i>	<i>Melilotus indica</i>
<i>Argyrolobium roseum</i>	<i>Mentha mozafferiani</i>
<i>Aristida abnormis</i>	<i>Micromeria persica</i>
<i>Aristida adscensionis</i>	<i>Monsonia nivea</i>
<i>Aristida caerulescens</i>	<i>Moricandia sinaica</i>
<i>Arnebia decumbens</i>	<i>Nepeta isphahanica</i>
<i>Arnebia fimbriopetala</i>	<i>Notoceras bicornis</i>
<i>Arnebia hispidissima</i>	<i>Oligomeris linifolius</i>
<i>Asteriscus hierochunticus</i>	<i>Oldenlandia retrorsa</i>
<i>Astragalus tribuloides</i>	<i>Ononis reclinata</i>
<i>Astragalus corrugatus</i>	<i>Ononis serrata</i>
<i>Astragalus asterias</i>	<i>Onosma spp.</i>
<i>Astragalus laristanicus</i>	<i>Outreya carduiformis</i>
<i>Atractylis cancellata</i>	<i>Parietaria alsinifolia</i>
<i>Blepharis persicus</i>	<i>Paronychia arabica</i>
<i>Blumea bovei</i>	<i>Pennisetum orientale</i>
<i>Boerhavia elegans</i>	<i>Phyla divisum</i>
<i>Brassica tournefortii</i>	<i>Phyla nodiflora</i>
<i>Bromus rubens</i>	<i>Phalaris minor</i>
<i>Bromus scoparius</i>	<i>Pimpinella barbata</i>

- Cenchrus pennisetiformis*
Centaureum pulchellum
Centaurea bruguieri
Centaurea pseudosinica
Cheeseya parviflora
Cleome oxypetala
Chloris virgata
Chrysopogon aucheri
Cometes surratensis
Cosmicarpus stenocarpus
Corchorus trilocularis
Conringia orientalis
Convolvulus argyroacanthus
Convolvulus leptocladus
Convolvulus gonocladus
Convolvulus oxysepalus
Convolvulus sericeus
Convolvulus turrillianus
Convolvulus virgatus
Cousinia prolifera
Crotalaria furfuracea
Cutandia dichotoma
Cynbopegon olivieri
Cynodon dactylon
Dactyloctenium aegyptiacum
Dactyloctenium scindicum
Desmostachya bipinnata
Dianthus macranthoides
Diceratella canescens
Dichanthium annulatum
Dicyclophora persica
Digitaria nodosa
Dipcadi unicolor
Diptolaxis harrar
Eleusine compressa
Elionurus royleanus
Emex spinosus
Enneapogon brachystachys
Enneapogon persicus
Eragrostis cilianensis
Erenopogon foveolatus
Erucaria hispanica
Fagonia bruguieri
Fagonia indica
Farsetia heliophila
Ferula stenocarpa
Forsskolia tenacissima
Gaillonia bruguieri
Gaillonia crucianelloides
Gaillonia sp.
Gymnarrhena micrantha
Haplophyllum tuberculatum
Helichrysum makranicum
Herniaria hirsuta
Heterantherium piliferum
Pimpinella eriocarpa
Plantago amplexicaulis
Plantago ciliata
Plantago coronopus
Plantago ovata
Plantago psyllium
Plantago stocksii
Polygala erioptera
Portulaca oleracea
Pulicaria gnaphalodes
Psannogeton canescens
Psannogeton crinitum
Reaumuria stocksii
Reichardia tingitana
Reseda aucheri
Rumex vesicarius
Saccharum kajkaiense
Saccharum ravennae
Salvia aegyptiaca
Salvia macilenta
Salvia macrosiphon
Salvia sharifi
Saponaria barbata
Scabiosa olivieri
Scabiosa sp.
Schismus arabicus
Schweinfurthia papilionacea
Sclerocephalus arabicus
Scorzonera tortuosissima
Silene linearis
Solanum indicum
Solanum nigrum
Spergula fallax
Spergularia marina
Stachys inflata
Sporobolus arabicus
Stipa capensis
Stipa parviflora
Stipagrostis hirtigluma
Stipagrostis plumosa
Taeniatherum crinitum
Teucrium orientale
Teucrium polium
Teucrium stocksianum
Tetrapogon villosus
Tribulus longipetala
Tribulus terrestris
Trichodesma africanum
Trichodesma longipedi-cellatum
Trichodesma stocksii
Tricholaena tenerriffae
Trigonella uncata
Trigonella stellata

<i>Hippocrepis bicontorta</i>	<i>Tragus racemosus</i>
<i>Hippocrepis unisiliqua</i>	<i>Urospermum picroides</i>
<i>Hirschfeldia incana</i>	<i>Verbascum farsistanicum</i>
<i>Hypparrhenia hirta</i>	<i>Viola stocksii</i>
<i>Ifloga spicata</i>	<i>Withania sonniferum</i>
<i>Koelpinia linearis</i>	<i>Zataria multiflora</i>
<i>Lagoecia cuminoides</i>	<i>Zoegea purpurea</i>
<i>Lasiurus hirsutus</i>	<i>Zumeria najdae</i>
<i>Launea oligocephala</i>	<i>Zygophyllum simplex</i>
<i>Lavandula stricta</i>	<i>Zygophyllum propinquum</i>

4. THE VEGETATION OF THE HALOPHYTIC COMMUNITIES

Including pure *Halocnemum strobilaceum* community of Mehrgan salty area, and *Salsola* spp., *Suaeda* spp., *Anabasis* sp., *Limonium* cf. *axillare* at the margins.

In coastal halophytic stand we can see following species:

<i>Bienertia cycloptera</i>	<i>Aeluropus lagopoides</i>
<i>Halocnemum strobilaceum</i>	<i>Aeluropus littoralis</i>
<i>Salicornia europaea</i>	
<i>Suaeda</i> sp.	

Also in the autumn everywhere in the province from Hajiabad to Bandar-e Abbas to B. Lenge and Minab to Bandar-e Jask the distribution of the *Hammada salicornia* is remarkable.

5. PLANT FORMATIONS OF THE MOUNTAINS AT THE NORTH OF THE PROVINCE

These are characterized by drought resistant species as *Amygdalus scoparia*, *Pistacia atlantica*, *Pistacia khinjuk*, *Acer monspessulanum* and many other species together with *Juniperus excelsa* at summit of Kuh-e Genu and Hemag. Plant species of the region (Trees, shrub and herbaceous) are listed below:

<i>Abutilon fruticosum</i>	<i>Ebenus stellata</i>
<i>Acacia ehrenbergiana</i>	<i>Ephedra foliata</i>
<i>Acacia nubica</i>	<i>Euphorbia larica</i>
<i>Acer monspessulanum</i>	<i>Fagonia bruguieri</i>
<i>Amygdalus eburnea</i>	<i>Ficus carica</i>
<i>Amygdalus scoparia</i>	<i>Fortuynia bungei</i>
<i>Amygdalus wendelboi</i>	<i>Gaillonia aucheri</i>
<i>Anvillea garcinii</i>	<i>Grewia tenax</i>
<i>Calotropis procera</i>	<i>Helianthemum kahiricum</i>
<i>Caparis cartilaginea</i>	<i>Helianthemum lippii</i>
<i>Caparis spinosa</i>	<i>Periploca aphylla</i>
var. <i>nucronifolia</i>	<i>Pergularia tomentosa</i>

<i>Cocculus pendulus</i>	<i>Pistacia atlantica</i>
<i>Convolvulus argyroscaanthus</i>	<i>Pistacia khinjuk</i>
<i>Convolvulus leiocalycinus</i>	<i>Prosopis spicigera</i>
<i>Convolvulus spinosus</i>	<i>Sageretia thea</i>
<i>Cotoneaster kotschyi</i>	<i>Taverniera cuneifolia</i>
<i>Cotoneaster rechingeri</i>	<i>Teconella undulata</i>
<i>Crepis kotschyi</i>	<i>Tephrosia appolina</i>
<i>Daphne mucronata</i>	<i>Zararia multiflora</i>
<i>Daphne stapfii</i>	<i>Ziziphus spina-christi</i>
<i>Dodonea viscosa</i>	<i>Zygophyllum eurypterum</i>

Annual and Perennial herbaceous species:

<i>Acantholimon scorpiurus</i>	<i>Lamarkia aurea</i>
<i>Acantholimon stocksii</i>	<i>Lappula spinocarpus</i>
<i>Acanthophyllum bracteatum</i>	<i>Lithospermum tenuiflorum</i>
<i>Aegilops crassa</i>	<i>Lotus schimperi</i>
<i>Aegilops cylindrica</i>	<i>Malcolmia africana</i>
<i>Aegopordon berardioides</i>	<i>Matthiola longipetala</i>
<i>Aizoon canarenis</i>	<i>Matthiola flavida</i>
<i>Anagalis arvensis</i>	<i>Medicago laciniata</i>
<i>Andrachne aspera</i>	<i>Mentha mozaffariani</i>
<i>Anthemis odontostephana</i>	<i>Micromeria persica</i>
<i>Argyrolobium roseum</i>	<i>Minuartia meyeri</i>
<i>Aristida adensionis</i>	<i>Moricandia sinaica</i>
<i>Aristida caerulescens</i>	<i>Nepeta depauperata</i>
<i>Artemisia spp.</i>	<i>Noaea mucronata</i>
<i>Arundo donax</i>	<i>Ononis sicula</i>
<i>Asperugo procumbens</i>	<i>Ononis viscosa</i>
<i>Aphodelus tenuifolius</i>	<i>Outreya carduiiformis</i>
<i>Asteriscus pygmaeus</i>	<i>Parietaria judaica</i>
<i>Astragalus tribuloides</i>	<i>Pennisetum orientale</i>
<i>Astragalus asterias</i>	<i>Pentanema divaricata</i>
<i>Astragalus (Leucocercis)</i>	<i>Pentatropis spiralis</i>
<i>mucronifolius</i>	<i>Peucedanum cupulare</i>
<i>Astragalus (Microphysa) sp.</i>	<i>Phagnalon nitidum</i>
<i>Astragalus (Tragacantha) spp.</i>	<i>Pimpinella barbata</i>
<i>Atractylis cancellata</i>	<i>Pimpinella eriocarpa</i>
<i>Biscutella didyma</i>	<i>Plantago amplexicaule</i>
<i>Blepharis persicus</i>	<i>Plantago ovata</i>
<i>Calendula persica</i>	<i>Plantago ciliata</i>
<i>Caralluma edulis</i>	<i>Platychaete aucheri</i>
<i>Carthamus oxyacantha</i>	<i>Platychaete glaucescens</i>
<i>Cenchrus ciliaris</i>	<i>Poa sinaica</i>
<i>Cenchrus pennisetiformis</i>	<i>Podolotus hosackioides</i>
<i>Cerastium inflatum</i>	<i>Polygala erioptera</i>
<i>Chorispora tenella</i>	<i>Pterocephalus wendelboii</i>
<i>Chrozophora obliqua</i>	<i>Reseda aucheri</i>
<i>Chrysopogon aucheri</i>	<i>Rochelia dispersa</i>
<i>Clypeola aspera</i>	<i>Rosularia nodosa</i>
<i>Convolvulus leptocladus</i>	<i>Saccharum ravense</i>
<i>Convolvulus vigatus</i>	<i>Salvia aegyptiaca</i>
<i>Conringia planisiliqua</i>	<i>Salvia macrosiphon</i>
<i>Cousinia stocksii</i>	<i>Salvia sharifi</i>
<i>Crupinia crupinastrum</i>	<i>Scabiosa olivieri</i>

<i>Cymbopogon olivieri</i>	<i>Scorpiurus muricatus</i>
<i>Delphinium saniculifolium</i>	<i>Scorzonera pseudolanata</i>
<i>Dianthus macranthoides</i>	<i>Scrophularia striata</i>
<i>Dicyclophora persica</i>	<i>Scutellaria ariana</i>
<i>Digitaria nodosa</i>	<i>Silene linearis</i>
<i>Dionysia revoluta</i>	<i>Silene apetala</i>
<i>Echinops spp.</i>	<i>Silene brahuica</i>
<i>Ennespogon persicus</i>	<i>Sisymbrium irio</i>
<i>Eragrostis cilianensis</i>	<i>Solanum incanum</i>
<i>Erodium cicutarium</i>	<i>Sonchus tenerrimus</i>
<i>Euphorbia granulata</i>	<i>Stachys inflata</i>
<i>Euphorbia indica</i>	<i>Stipa capensis</i>
<i>Euphorbia osyridea</i>	<i>Stipa parviflora</i>
<i>Ferula stenocarpa</i>	<i>Telephium polyspermum</i>
<i>Forsskolia tenacissima</i>	<i>Tetrapogon villosus</i>
<i>Fumaria parviflora</i>	<i>Teucrium orientale</i>
<i>Gaillonia bruguieri</i>	<i>Teucrium polium</i>
<i>Gaillonia calyptera</i>	<i>Teucrium stocksianum</i>
<i>Gaillonia crucianelloides</i>	<i>Thymelaea passerina</i>
<i>Gastrocotyle hispida</i>	<i>Trachynia distachya</i>
<i>Geranium rotundifolium</i>	<i>Trichodesma africanum</i>
<i>Geranium mascatense</i>	<i>Tricholaena tenerriffae</i>
<i>Glossonema varians</i>	<i>Umbilicus intermedius</i>
<i>Glaucium vitellinum</i>	<i>Urospermum picroides</i>
<i>Haplophyllum canaliculatum</i>	<i>Verbascum farsistanicum</i>
<i>Haplophyllum tuberculatum</i>	<i>Verbascum scoparia</i>
<i>Helianthemum salicifolium</i>	<i>Zoegea purpurea</i>
<i>Helichrysum leucocephalum</i>	<i>Zumeria majdae</i>
<i>Hippocrepis unisiliquosa</i>	
<i>Hycoscyamus nutans</i>	
<i>Hycoscyamus senecionis</i>	
<i>Inula grantioides</i>	

High altitudes and the top of Kuh-e Hemag are covered with cushion shaped formations consisting of *Onobrychis cornuta*, *Acantholimon sp.*, *Acanthophyllum* together with other plants as below:

Stachys acerosa, *Teucrium polium*, *Nepeta glomerulosa*, *Tulipa sp.*, *Colchicum sp.*, *Gagea sp.*, *Scariola orientalis*, *Astragalus (Malacothrix)*, *Astragalus (Caprini)*, *Poa sinica*, *Poa bulbosa*, *Alyssum sp.*, *Veronica ssp.*, *Dionysia revoluta*.

Although Kuh-e Genu is very interesting because besides most of the above mentioned species there are rather pure community of *Artemisia lehmanniana* at altitude of 1600-2000 m. and sometimes one can see pure community of *Convolvulus argyroacanthus*.

Fruit trees and shrubs of the province which some of them are exotic are:

Citrus lemon	Musa ssp.
Citrus nobilis	Olea europaea
Citrus sinensis	Phoenix dactylifera
Cordia myxa	Psidium guajava
Elaeagnus angustifolia	Punica granatum
Eugenia jambolana	Terminalia catapa
Eugenia jambos	Vitis vinifera
Ficus carica	Ziziphus spina-christii
Mangifera indica	

Ornamental trees and shrub which most of them are exotic are:

Albizia lebbek	Melia indica
Bougainvillea spectabilis	Merremia dissecta
Caesalpinia griffitii	Nerium oleander
Dedonea viscosa	Nerium indicum
Euphorbia tirucali	Ocimum basilicum
Ficus bengalensis	Ocimum sanctum
Gossypium herbaceum	Parkinsonia aculeata
Hibiscus rosa-chinensis	Prosopis juliflora
Hibiscus syriacus	Prosopis spicigera
Ipomea pescapre	Sesbania sesban
Ipomea crassifolia	Tecomas ssp.
Jasminum sp.	Terminalia catapa
Leucena sp.	Washingtonia filimentosa

In my study on Hormozgan province vegetation I come across to some new plant records and new species for the Flora of Iran.

New species:

- Tavernieria echinata Mozaffarian
- Verbascum scoparium Mozaffarian
- Mentha mozaffariani Z.Jamzad
- Pycnocyca bashagardiana Mozaffarian

New records:

- Amberboa lippii
- Anticharis glutinosa
- Cotoneaster rechingeri
- Dactyloctenium aegyptiacus
- Elionurus royleanus
- Helianthemum kahiricum
- Scutellaria ariana
- Trichodesma longipedicellatum

In this province we can see some species which do not occur in other provinces of Iran and some endemics which are indicated by Asterisk (*).

- *Mentha mozaffariani
- *Tavernieria echinata
- *Verbascum scoparium
- Carrichtera annua
- Cotoneaster rechingeri
- Elionurus royleana

* <i>Zumeria najdae</i>	<i>Lavandula stricta</i>
<i>Agave littoralis</i>	<i>Podolotus hosackioides</i>
<i>Anvillea garcini</i>	<i>Rhyncosia schimperii</i>
<i>Carralluna edulis</i>	<i>Scutellaria ariana</i>

Typical Saharo-Sindian Territory elements are the followings:

<i>Acacia</i> sp.	<i>Helianthemum lippi</i>
<i>Anastatica hierochuntica</i>	<i>Heliotropium bacciferum</i>
<i>Asphodelus tenuifolius</i>	<i>Indigofera intricata</i>
<i>Blepharis persicus</i>	<i>Leptadenia pyrotechnica</i>
<i>Calotropis procera</i>	<i>Lotus garcini</i>
<i>Caparis decidua</i>	<i>Moricandia sinaica</i>
<i>Chrysopogon aucheri</i>	<i>Nannorrhops ritchiana</i>
<i>Cleome brachycarpa</i>	<i>Ochradenus baccatus</i>
<i>Cocculus pendulus</i>	<i>Pennisetum divisum</i>
<i>Convolvulus</i> sp.	<i>Periploca aphylla</i>
<i>Cordya nyxa</i>	<i>Prosopis spicigera</i>
<i>Crotalaria furfuracea</i>	<i>Saccharum kajkaiense</i>
<i>Cymbopogon olivieri</i>	<i>Salvadora persica</i>
<i>Enneapogon persicus</i>	<i>Salvia macilentia</i>
<i>Eremopogon foveolatus</i>	<i>Sphaerocoma aucheri</i>
<i>Euphorbia larica</i>	<i>Sporobolus arabicus</i>
<i>Fagonia</i> spp.	<i>Tephrosia persica</i>
<i>Farsetia heliophila</i>	<i>Tetrapogon villosus</i>
<i>Ficus bengalensis</i>	<i>Ziziphus spina-christi</i>
<i>Gaillonia aucheri</i>	<i>Zygophyllum propinquum</i>

CONCLUSION

In the Hormozgan province some families are very important because of the high number of species and the ecological variations. These families can be listed as below:

Pea family (Leguminosae) with ca. 65 species, Sunflower family (Compositae) with ca. 65 species, Grass family (Gramineae) with ca. 60 species, Mustard family (Cruciferae) with ca. 26 species, Borage family (Boraginaceae) with ca. 18 species respectively have a wide distribution in the province. But because of the special subtropic climatological conditions there are some other families which are peculiar to this territory. They have not so many species, but they are widely distributed and contribute much to the physiognomy of the vegetation. Some of these families are: Asclepiadaceae with *Calotropis procera* and *Periploca aphylla* which forms rather pure communities in some place, Tamariaceae with many species specially in the river beds, Convolvulaceae with ca. 15 species in our province and with wide distribution and high density.

Apocynaceae with *Nerium indicum* which forms dense and conspicuous communities rather in the river beds and *Rhazia stricta* with rather small stands in some places, and the Chenopodiaceae, the species of which are conspicuous specially in the autumn and have a rather wide distribution.

Besides others the families Zygophyllaceae, Plantaginaceae, Capparaceae, Rubiaceae, Caryophyllaceae, Resedaceae, and Aizoaceae have a special importance in the Flora of the region.

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