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**Checklist of the Flora of Wadi Haboonat Al Jabal Al Akhdar
(Cyrenaica, Libya)**

El Rabiai¹G.T. and M. Al tira²

1, 2: Botany Department, Science Faculty, Benghazi University, Libya

Abstract

The flora of Wadi Haboon was studied and analyzed. In this work, a preliminary checklist of the plant species of the Wadi was provided. The investigation revealed the presence of 43 families, 136 genera and 166 species. This information could eventually aid in interpreting changes in populations due to man-made alterations.

Key-Words: Libya, Flora, Taxonomy, Wadi Haboon

Introduction

Al-Jabal Al-Akhdar (Green Mountain), a low to medium mountainous landscape, is located in the northeast of Libya; reaching 878 m above sea level was created as a result of a tectonic elevation of a primary plain of marine accumulation. It is characterized by a Mediterranean climate, with cool rainy winter and hot dry summer (El-Tantawi, 2005). Al-Jabal Al-Akhdar is one of the four major centers of endemism which holds about 50% of the total endemic species in Libya (Boulos, 1997; Davis et al., 1994). Wadi Haboon lies between 21° 08' 42" and 21° 09' 54" E longitude and 32° 43' 48" and 32° 42' 36" N latitude on the North east region, Al-Jabal Al-Akhdar. The Wadi rises 100 meters above sea level and pours in the basin of "almlekh" on the Mediterranean coast in the Cyrenaica region (Figs. A&B).

Wadi Haboon is one of the valleys that branch out from Wadi Al Koof such as other valleys like wadi Al-mlekah, Al-laleb and Shloof. It is about 9 km north-east of Battah and Tolmeita area and about 8 km southeast of Ain Al-mlekah. It descends towards the north and empties into the sea in the Al-mlekah Basin.

Material and Methods

The present work is based on intensive field work upon several visits between the periods of 2005 to 2011. The plant collections were treated following the general Herbarium techniques then deposited in the Cyrenaica Herbarium (CH) at the Botany Department (Sciences faculty, Benghazi University).

The Checklist

The checklist's family sequence started with gymnosperms followed by the angiosperms, monocots and then the dicots. Genera and species are arranged alphabetically within each family.

* Corresponding Author

Group I. Gymnosperms

No.	Species	Family	Order
1	<i>Juniperus phoenicea</i> L.	Cupressaceae	Pinales
2	<i>Pinus haloensis</i> Mill.	Pinaceae	

Group II. Angiosperms

Sub group 1. Monocotyledons

No.	Species	Family	Order
3	<i>Arisarium vulgare</i> Targ. Tozz.	Aracaceae	Alismatales
4	<i>Gladiolus byzantinus</i> Miller	Iridaceae	Asparagales
5	<i>Rumex bulbocodium</i> (L.) Seb. Mauri.		
6	<i>Asparagus aphyllus</i> L.	Liliaceae	Liliales
7	<i>Colchicum ritchii</i> R. Br.		
8	<i>Dipcadiserotinum</i> (L.) Medic.		
9	<i>Muscaricacemosum</i> (L.) Mill.		
10	<i>Smalixaspera</i> L.	Plantaginaceae	Lamiales
11	<i>Plantagolanceolata</i> L.		
12	<i>Andropogondistacyos</i> L.	Poaceae	Poales
13	<i>Briza maxima</i> L.		
14	<i>Bromus rigidus</i> Roth		
15	<i>B. rubens</i> L.		
16	<i>Dactylis glomerata</i> L.		
17	<i>Desmazeriaphilistaea</i> ssp. <i>rhofsi</i> (Coss.) H. Scholz		
18	<i>Gastridium ventricosum</i> (Gouan) Schinz et Thell.		
19	<i>Hordeum vulgare</i> L.		
20	<i>Phalaris aquatica</i> L.		
21	<i>P. brachystachys</i> Link		
22	<i>P. paradoxa</i> L.		

Sub group 2. Dicotyledons

23	<i>Ammimajus</i> L.	Apiaceae	Apiales
24	<i>A. visnaga</i> (L.) Lam.		
25	<i>Ammoides pusilla</i> (Brot.) Breist.		
26	<i>Anethum graveolens</i> L.		
27	<i>Brachyapium dichoomum</i> (L.) Maire		
28	<i>Bunium fontainesii</i> (Pers.) Maire.		
29	<i>Bupleurum lancifolium</i> Hornem.		
30	<i>Conium maculatum</i> L.		
31	<i>Daucus syrticus</i> Murb.		
32	<i>Ferula tingitana</i> L.		
33	<i>Foeniculum vulgare</i> L.		
34	<i>Pimpinella peregrina</i> L.		
35	<i>Scaligeiacretica</i> (Mill.) Boiss.		
36	<i>Scandix australis</i> L.		
37	<i>S. pecten-veneris</i> L.		
38	<i>Torilis leptophylla</i> (L.) Reichb.		
39	<i>Amberboaleucantha</i> Cosson ex Batt.		
40	<i>Anthemis secundiramea</i> Biv		
41	<i>Atractylis cancellata</i> L.		
42	<i>Bellis sylvestris</i> Cyr.		
43	<i>Bombycilaenadiscolor</i> (Pers.) Lainz		
44	<i>Calendula arvensis</i> L.		
45	<i>Carduus getulus</i> Pomel		
46	<i>Centaurea alexandrina</i> Delile		
47	<i>Chrysanthemum carinatum</i> Schousbøe		
48	<i>Hedypnoiscretica</i> (L.) Dum.		
49	<i>Helichrysum stoechas</i> (L.) Moench		
50	<i>Hypochoeris sacyphorus</i> L.		
51	<i>H. glabra</i> L.		

52	<i>Leontodontuberosus</i> L.		
53	<i>Notobasisnyiaca</i> (L.)Cass.		
54	<i>Pallenisspinosa</i> (L.)Cass		
55	<i>Phagnalon rupestre</i> (L.)DC.		
56	<i>Ptilostemognaphaloides</i>		
57	<i>Reichardiatingitana</i> (L.)Roth		
58	<i>Rhagadiolusstellatus</i> (L.)Gaertn		
59	<i>Seneciogallicus</i> Chiax		
60	<i>S. leucanthemifolius</i> Poiret		
61	<i>Silybummarianum</i> (L.) Gaertner		
62	<i>Tragopogonporrifolius</i> L.		
63	<i>Urospermumdalechampii</i> (L.)Scop. ex F. W. Schmidt		
64	<i>Boragoofficinalis</i> L.	Boraginaceae	Liliales
65	<i>Cerinthemagor</i> L.		
66	<i>Cynoglossumcherifolium</i> L.		
67	<i>Echiumangustifolium</i> Mill.		
68	<i>E. plantaginium</i> L.		
69	<i>Biscutelladidyma</i> L.	Brassicaceae	Brassicales
70	<i>Capsellabursa-pastoris</i> (L.)Medic.		
71	<i>Didesmumaegyptius</i> (L.)Desve.		
72	<i>Erucariamicrocarpa</i> Boiss.		
73	<i>Rapistrumrugosum</i> (L.)All.		
74	<i>Sinapisflexuosa</i> Poiret		
75	<i>S. pubescens</i> L.		
76	<i>Thlaspiperfoliatum</i> L.		
77	<i>Ceratoniasiliqua</i> L.	Caesalpiniaceae	Fabales
78	<i>Loniceraetrusca</i> Santi.	Caprifoliaceae	Dipsacales
79	<i>Viburnum tinus</i> L.		
80	<i>Vaccariapyramidata</i> Medic.	Caryophyllaceae	Caryophylales
81	<i>Cistusincanus</i> L.	Cistaceae	Malvales
82	<i>C.parviflorus</i> Lam.		
83	<i>C. salvifolius</i> L.		
84	<i>Fumanalaevis</i> (Cav.) Senner		
85	<i>Helianthemumcinereum</i> (Cav.) Pers		
86	<i>Convolvulus althaeoides</i> L.	Convolvulaceae	Solanales
87	<i>C. humilus</i> Jacq.		
88	<i>C. tricolor</i> L.		
89	<i>Ecballiumelaterium</i> (L.)A.Rich.	Cucurbitaceae	Cucurbitales
90	<i>Scabiosaarenaria</i> Forskål	Dipsacaceae	Dipsacales
91	<i>Arbutus pavarii</i> Pumb.	Ericaceae	Ericales
92	<i>Erica multiflora</i> L.		
93	<i>E. sicula</i> Guss.		
94	<i>Euphorbiapeplus</i> L.	Euphorbiaceae	Malpighiales
95	<i>Mercurialisannua</i> L.		
96	<i>Argyrolobiumuniflorum</i> (Decne) Jaub.&Spach.	Fabaceae	Fabales
97	<i>Anthyllis tetraphylla</i> L.		
98	<i>Calicotomevillosa</i> (Poir.)Link		
99	<i>Coronillascorpoides</i> (L.) Koch.		
100	<i>Crotalaria thebaica</i> (Del.)DC.		
101	<i>Genistaacanthoclada</i> DC.		
102	<i>Hymenocarposcircinatus</i> (L.) Savi.		
103	<i>Ononispendula</i> Desf.		
104	<i>O. reclinata</i> L.		
105	<i>O. viscosa</i> L.		
106	<i>Scorpiurusmuricatus</i> L.		
107	<i>Vicia sativa</i> L.		
108	<i>Quercuscoccifera</i> L.	Fagaceae	Fagales
109	<i>Fumariabastardii</i> Boreau	Fumariaceae	Ranunculales
110	<i>F. capreolata</i> L.		
111	<i>Centauriumpulchellum</i> (Swartz)Druce	Gentianaceae	Gentinales
112	<i>C.tenuiflorum</i> (Hoffmanns& Link) Fritsch		
113	<i>Erodiumgruinum</i> (L.) L'Hér.	Geraniaceae	Geraniales

114	<i>E. malacoides</i> (L.) L' Herit.		
115	<i>E. neuradifolium</i> Delile		
116	<i>Geranium brutium</i> Gasp.		
117	<i>G. molle</i> L.		
118	<i>G. tuberosum</i> Linn.		
119	<i>Globulariaaalypum</i> Linn.	Globulariaceae	Gentianales
120	<i>Ajugaiva</i> (L.) Schreber		
121	<i>Ballotaandreuiziana</i> Pamp.		
122	<i>Marrubiumvulgars</i> L.		
123	<i>MicromeriaJuliana</i> (L.) Benth. exReichenb.		
124	<i>M. nervosa</i> (Desf.)Benth.		
125	<i>Neptascordotis</i> L.		
126	<i>Phlomisflocosa</i> D.		
127	<i>Prasiummajus</i> L.	Lamiaceae	Lamiales
128	<i>Rosmarinusoffacinalis</i> L.		
129	<i>Salvia verbenaca</i> L.		
130	<i>Stachystoumefortii</i> Poiret.		
131	<i>Teucriumbrevifolium</i> Schreber		
132	<i>T.divaricatum</i> Sieber ex Boiss.		
133	<i>Thymusalgeriensis</i> Boiss.etReut.		
134	<i>T. capitatus</i> (L.)Hoffm&Link		
135	<i>Linumbienne</i> Miller.		
136	<i>L. nodiflorum</i> L.	Linaceae	Malpighiales
137	<i>L. strictum var. spicatum</i> Pers.		
138	<i>Lavaterabryoniifolia</i> Miller		
139	<i>Malvaeegyptical</i> L.	Malvaceae	Malvales
140	<i>M.sylvestris</i> L.		
141	<i>Oteaeuropaea</i> L.	Oleaceae	Ranunculales
142	<i>Papaverhybridum</i> L.		
143	<i>P. rhoeasvar.rhoeas</i> L.	Papaveraceae	Ranunculales
144	<i>Anagallisarvensis</i> L.		
145	<i>Cyclamen rohlfsianum</i> Aschers.	Primulaceae	Primulales
146	<i>Cytinushypocistis</i> L.	Rafflesiaceae	Rafflesiales
147	<i>Adonis aestivalvis</i> L.		
148	<i>A.microcarpa</i> DC.		
149	<i>Ranunculus ballatus</i> L.	Ranunculaceae	Ranunculales
150	<i>Rhamnuslycioides</i> L.	Rhamnaceae	
151	<i>Sarcopoteriumspinosum</i> (L.)Spach	Rosaceae	Rosales
152	<i>Asperulaarvensis</i> L.		
153	<i>Galiumtricornutum</i> Dandy		
154	<i>G. verrucosum</i> Huds.	Rubiaceae	Gentianales
155	<i>Sheradiaarvensis</i> L.		
156	<i>Valantiahispida</i> L.		
157	<i>Anarrhinumfruticosum</i> Desf.		
158	<i>Linariavirgata</i> (Poir) Desf.	Scrophulariaceae	Scrophulariales
159	<i>Misopatesorantium</i> (L.)Rafin.		
160	<i>Solanumsodomeum</i> L.	Solanaceae	Solanales
161	<i>Thymelaeahirsute</i> (L.) Endl.	Thymaliaceae	Myrtales
162	<i>Urticapilulifera</i> L.	Urticaceae	Rosales
163	<i>Centranthuscalcitrapae</i> (L.)Dufresne		
164	<i>Fediacaput-bovis</i> Pomel.	Valerianaceae	Dipsacales
165	<i>Valerianelladiscoidea</i> (L.)Loisel		
166	<i>Viola scorpiuroides</i> Coss.	Violaceae	Violales

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