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# Studies on the flora of Yemen. 3. On the Flora of Wadi Dahr

A. S. DUBAIE  
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## RÉSUMÉ

DUBAIE, A. S., A. N. GIFRI & M. EL-MONAYERI (1993). Etude de la flore du Yémen. 3. Sur la flore de Wadi Dahr. *Candollea* 48: 101-109. En anglais, résumés français et anglais.

Les auteurs ont récoltés à Wadi Dahr de 1988 à 1990, 234 espèces appartenant à 53 familles et en particulier 4 espèces de *Polypodiaceae*.

## ABSTRACT

DUBAIE, A. S., A. N. GIFRI & M. EL-MONAYERI (1993). Studies on the flora of Yemen. 3. On the Flora of Wadi Dahr. *Candollea* 48: 101-109. In French, French and English abstracts.

In the period 1988 to 1990 the authors collected 234 species belonging to 53 families, among them 4 species belonging to *Polypodiaceae*, from Wadi Dahr.

**KEY-WORDS:** Flora — Wadi Dahr — Yemen.

This study is based on collections made during 1988/90 and also on preceding works on Wadi Dahr made by ALHUBASHI & al. (1991), DUBAIE & al. (1990) and EL-MONAYERI & al. (1991). Wadi Dahr is a fertile valley 10 Km North West of Sana'a, the capital of Yemen.

Wadi Dahr lies in the volcanic highlands of Yemen between long. 44°05'-44°10'E. and lat. 15°25'-15°30'N. with an altitude ranging between 2000-2800 m asl. The Wadi extends for a distance of ca. 10 km.

This area is in the semi-arid region; the climate being determined primarily by altitude. The mean temperature in summer is 22°C and in winter drops to near or below freezing point at night. The mean relative humidity is low throughout the year. The total mean annual rainfall is about 227.6 mm.

Several references used as a guide for identification of the plants collected are: ALHUBAISHI & al. (1984, 1991); COLLENETTE (1985); DUBAIE & al. (1990a, 1990b, 1991) and EL-MONAYERI & al. (1991).

The herbarium material is housed in the Herbarium of the Faculty of Science, University of Sana'a.

The species are listed hereafter, according to family, in alphabetical order.

## ACANTHACEAE

*Acanthus arboreus* Forssk.  
*Blepharis ciliaris* (L.) B. L. Burtt  
*Justicia flava* (Vahl) Vahl  
*Ruellia patula* Jacq.

## AIZOACEAE

*Aizoon canariense* L.  
*Zaleya pentandra* (L.) C. Jeffrey

## AMARANTHACEAE

*Achyranthus aspera* L. var. *sicula* L.  
*Aerva javanica* (Burm. f.) Juss. ex Schultes  
*Aerva lanata* (L.) Juss. ex Schultes  
*Amaranthus chlorostachys* Willd.  
*Amaranthus graecizans* L. subsp. *graecizans*  
*Amaranthus hybridus* L.  
*Pupalia lappacea* (L.) Juss. var. *velutina* (Moq.) Hook.

## AMARYLLIDACEAE

*Crinum yemense* Defl.

## ANACARDIACEAE

*Schinus molle* L.  
*Schinus terpenifolius* L.

## ASCLEPIADACEAE

*Calotropis procera* (Aiton) Aiton f.  
*Caralluma deflersiana* Lavr.  
*Caralluma penicillata* (Defl.) N. E. Br.  
*Caralluma petraea* Lavr.  
*Caralluma plicatiloba* Lavr.  
*Caralluma quadrangula* (Forssk.) N. E. Br.  
*Caralluma wissmanni* Schwartz  
*Gomphocarpus sinaicus* Boiss.  
*Kanahia laniflora* (Forssk.) R. Br.  
*Pergularia daemia* (Forssk.) Chiov.  
*Pergularia tomentosa* L.  
*Rhytidocaulon macrolobum* Lavr.  
*Sarcostemma* sp.

## BORAGINACEAE

*Alkanna orientalis* (L.) Boiss.  
*Anchusa millrei* Willd.  
*Arnebia decumbens* (Vent.) Coss. & Kral.  
*Heliotropium aegyptiacum* Lehm.  
*Heliotropium dolosum* De Not.

*Heliotropium lasiocarpum* Fisher & Mayer  
*Heliotropium longiflorum* Hochst. & Steud.  
*Moltkiopsis ciliata* (Forssk.) Johnston  
*Ogastemma pusillum* Brummit  
*Trichodesma africanum* (L.) R. Br.

## CACTACEAE

*Opuntia dillenii* (Ker Gawler) How.  
*Opuntia ficus-indica* L.

## CAPPARACEAE

*Capparis cartilaginea* Decne.  
*Capparis decidua* (Forssk.) Edgew.  
*Capparis spinosa* L.  
*Cleome africana* Botsch.

## CARYOPHYLLACEAE

*Cometes surattensis* L.  
*Paronychia chlorothyrsa* Murb.  
*Polycarpaea repens* (Forssk.) Asch.

## CELASTRACEAE

*Catha edulis* Forssk.

## CHENOPODIACEAE

*Atriplex leucoclada* Boiss.  
*Chenopodium album* L.  
*Chenopodium ambrosioides* L.  
*Chenopodium murale* L.  
*Chenopodium schraderianum* Schultes  
*Cornulaca leucacantha* Delile  
*Suaeda fruticosa* Forssk. ex Gmel.  
*Suaeda vermiculata* Forssk.

## CISTACEAE

*Helianthemum kahiricum* Delile  
*Helianthemum lippii* (L.) Dum.-Cours.

## COMPOSITAE

*Anthemis pseudocotula* Boiss.  
*Anthemis* sp.  
*Anvillea garcinii* (Burm.) DC.  
*Bidens biternata* (Lour.) Merr.  
*Carthamus tinctorius* L.  
*Centaurea sinaica* DC.  
*Conyza bonariensis* (L.) Cronq.  
*Conyza incana* Willd.

*Conyza stricta* Willd.  
*Conyza stricta* Willd. var. *pinnatifida* (Don) Kitam.  
*Conyza* sp.  
*Crisum vulgare* L.  
*Echinops spinosissimus* Turra  
*Felicia abyssinica* A. Rich.  
*Felicia dentata* (A. Rich) Dandy  
*Flaveria trinerva* (Spereng.) Mohr  
*Gnaphalium luteo-album* L.  
*Kleinia odora* (Forssk.) DC.  
*Kleinia semperviva* DC.  
*Onopordon sibthorpiatum* Boiss. & Heldr.  
*Osteospermum vaillantii* (Decne.) Norl.  
*Phagnalon sinaiecum* Bornm. & Kneucker  
*Pulicaria arabica* (L.) Cass.  
*Pulicaria crispa* (Forssk.) Benth. & Hook.  
*Pulicaria jaubertii* Gamel-Eldin.  
*Pulicaria orientalis* Jaub. & Spach  
*Pulicaria undulata* (L.) Kostel.  
*Reichardia tingitana* (L.) Roth  
*Reichardia tingitana* (L.) Roth var. *arabica* (Hochst. & Steud.) Asch. & Schweinf.  
*Senecio schimperi* Schultz-Bip.  
*Silybium marianum* (L.) Gaertn.  
*Tagetes minuta* L.  
*Vernonia abyssinica* Schultz-Bip.  
*Vernonia cinerea* (L.) Less.  
*Volutaria albicaulis* Defl.  
*Xanthium spinosum* L.

#### CONVOLVULACEAE

*Convolvulus virigatus* Boiss.  
*Cressa cretica* L.

#### CRUCIFERAE

*Brassica tournefortii* Gouan  
*Diplotaxis eruroides* (L.) DC.  
*Diplotaxis harra* (Forssk.) Boiss.  
*Farsetia aegyptia* Turra  
*Farsetia longisiliqua* Decne.  
*Farsetia ramosissima* Hochst. ex Boiss.

#### CUCURBITACEAE

*Citrullus colocynthis* (L.) Schrad.  
*Cucumis prophetarum* L.

#### CYPERACEAE

*Cyperus bulbosus* Vahl  
*Cyperus laevigatus* L.  
*Cyperus rotundus* L.

## EPHEDRACEAE

*Ephedra alata* Decne.

## EUPHORBIACEAE

*Euphorbia granulata* Forssk.  
*Euphorbia helioscopia* L.  
*Euphorbia inaequilatera* Sond.  
*Euphorbia schimperi* Presl  
*Euphorbia schimperiana* Scheele  
*Ricinus communis* L.

## GRAMINEAE

*Aeluropus littoralis* (Gouan) Parl.  
*Aristida adscensionis* L.  
*Bromus tectorum* L.  
*Bromus tectorum* L. var. *nudus* Klett. & Rich.  
*Cymbopogon schoenanthus* (L.) Sprengel  
*Cynodon dactylon* (L.) Pers.  
*Pennisetum divisum* (Gmel.) Henrard  
*Pennisetum setaceum* (Forssk.) Chiov.  
*Polypogon monspeliensis* (L.) Desf.  
*Saccharum ravennae* (L.) Murray  
*Schoenefeldia gracilis* Kunch.  
*Setaria viridis* (L.) P. Beauv.  
*Stipagrostis ciliata* (Desf.) De Winter  
*Stipagrostis obtusa* (Delile) Nees  
*Stipagrostis plumosa* (L.) Munro ex T. Anders.

## GERANIACEAE

*Monsonia nivea* (Decne.) Decne. ex Webb

## JUNCACEAE

*Juncus bufonius* L.

## LABIATAE

*Lavandula pubescens* Decne.  
*Lavandula stricta* Delile  
*Leucas inflata* Benth.  
*Mariandra benghalensis* Benth.  
*Marrubium vulgare* L.  
*Mentha lavandula* Willd.  
*Mentha longifolia* L. subsp. *schimperi* (Briq.) Briq.  
*Mentha piperata* L.  
*Micromeria imbricata* (Forssk.) Christen.  
*Nepeta deflersiana* Schweinf. ex Hedge  
*Nepeta sheilae* Hedge & King

*Ocimum basilicum* L.  
*Teucrium yemense* Defl.  
*Thuspeinanta persica* (Boiss.) Briq.

LEGUMINOSAE — CAESALPINOIDEAE

*Cassia italica* (Miller) Lam. ex Steudel  
*Cassia sinna* L.

LEGUMINOSAE — MIMOSOIDEAE

*Acacia ehrenbergiana* Hayne  
*Acacia gerrardii* Benth.  
*Acacia negrii* Pichi-Sermolli  
*Acacia oerofota* (Forssk.) Schweinf.  
*Acacia tortilis* (Forssk.) Hayne

LEGUMINOSAE — PAPILIONOIDEAE

*Astragalus abyssinicus* Steudel  
*Astragalus fatimensis* Hochst. ex Chiov.  
*Astragalus kahiricus* DC.  
*Crotalaria emarginella* Vatke  
*Crotalaria persica* Merr.  
*Indigofera caerulea* Roxb.  
*Indigofera oblongifolia* Forssk.  
*Lotus corniculatus* L.  
*Melilotus indica* (L.) All.  
*Ononis natrx* L.

MALVACEAE

*Abutilon muticum* (Del.) Webb  
*Abutilon pannosum* (Forst. f.) Schlecht.  
*Althaea ludwigii* L.  
*Hibiscus deflersii* Schweinf.  
*Hibiscus micranthus* L. f.  
*Hibiscus vitifolius* L.  
*Malva parviflora* L.

MORACEAE

*Ficus palmata* Forssk.  
*Ficus populifolia* Vahl.  
*Ficus vasta* Forssk.

NEURADACEAE

*Neurada procumbens* L.

NYCTAGINACEAE

*Commicarpus boissieri* (Heimerl) Cufod.  
*Commicarpus grandiflorus* (A. Rich) Standley

*Commicarpus plumbagineus* (Car.) Standley  
*Commicarpus sinuatus* Meikle

## OLEACEAE

*Olea chrysophylla* Lam.  
*Olea* sp.

## OROBANCHACEAE

*Orobanche cernua* Loefl. var. *latebracteata* Beck

## PAPAVERACEAE

*Argemone mexicana* L.  
*Argemone ochroleuca* Sweet  
*Papaver rhoeas* L.

## PLANTAGINACEAE

*Plantago lanceolata* L.  
*Plantago major* L.

## PLUMBAGINACEAE

*Limonium pruinosum* (L.) Kuntze

## POLYGALACEAE

*Polygala abyssinica* R. Br.

## POLYGONACEAE

*Calligonum comosum* L'Hérit.  
*Emex spinosus* (L.) Campderá  
*Polygonum salicifolium* Brouss. ex Willd.  
*Rumex limoniastrum* Jaub. & Spach  
*Rumex vesicarius* L.

## POLYPODIACEAE

*Actiniopteris semiflabellata* Pichi-Sermolli  
*Adiantum capillus-veneris* L.  
*Adiantum incisum* Forssk.  
*Asplenium trichomanes* L.

## RESEDACEAE

*Caylusea hexagyna* (Forssk.) M. L. Green  
*Ochradenus arabicus* Chaudhary, Hill & Miller  
*Reseda decursiva* Forssk.  
*Reseda sphenocleoides* Defl.

## RHAMNACEAE

*Ziziphus nummularia* (Burm. f.) Wight & Arn.  
*Ziziphus spina-christi* (L.) Willd.

## ROSACEAE

*Rosa abyssinica* R. Br.

## RUBIACEAE

*Coffea arabica* L.

## RUTACEAE

*Ruta chalepensis* L.

## SALICACEAE

*Salix alba* L.

## SCROPHULARIACEAE

*Cistanche tubulosa* (Schenck) Wight  
*Kickxia aegyptiaca* (Dum.) Náb.  
*Kickxia elatine* (L.) Dum. subsp. *crinita* (Mabille) W. Greuter

## SOLANAEAE

*Datura stramonium* L.  
*Lycium shawii* Roemer & Schultes  
*Solanum incanum* L.  
*Solanum nigrum* L.  
*Solanum nigrum* L. var. *villosum* L.  
*Solanum schimperianum* Hochst. ex A. Rich.  
*Solanum sepicula* Dun.  
*Solanum unguiculatum* A. Rich.  
*Solanum villosum* Lam.  
*Withania somnifera* (L.) Dun. in DC.

## TAMARICACEAE

*Tamarix aphylla* (L.) Karst.  
*Tamarix nilotica* (Ehrenb.) Bunge

## THYMELEACEAE

*Gnidia somalensis* (Franchet) Gilg

## UMBELLIFERAE

*Foeniculum vulgare* Mill.

## URTICACEAE

*Forskoalea tenacissima* L.  
*Urtica* sp.

## VERBENACEAE

*Lantana viburnoides* (Forssk.) Vahl.

## ZYGOPHYLLACEAE

*Fagonia arabica* L.  
*Fagonia glutinosa* Del.  
*Fagonia indica* Burm. f.  
*Peganum harmala* L.  
*Tribulus terrestris* L.  
*Zygophyllum simplex* L.

## REFERENCES

- ALHUBAISHI, A. A., M. EL-MONAYERI & A. S. DUBAIE (1991). Habitats and vegetation of Wadi-Dahr, Sana'a Yemen Arab Republic. I. The plateau and the slopes ecosystems. *Bull. Fac. Sci., Assiut Univ.* 20(2D): 1-24.
- ALHUBAISHI, A. A. & K. MULLER-HONENSTIEN (1984). *An introduction to the vegetation of Yemen*. In: CHAUDHARYM, S. A. & R. REVRI (1983), *Weeds of North Yemen*. Eschborn.
- COLLENETTE, S. (1985). *Illustrated guide to the flowers of Saudi Arabia*. MEPA, Scorpion, London.
- DUBAIE, A. S., A. A. ALHUBAISHI & M. EL-MONAYERI (1990a). Habitats and vegetation of Wadi-Dahr, Sana'a Yemen Arab Republic. II. The terraces and foothills ecosystems. *Bull. Fac. Sci. Assiut Univ.* 19(2D): 89-102.
- DUBAIE, A. S. & R. U. ABD EL-FATAH (1990b). Taxonomic studies on the genus *Solanum* L. in Yemen (Y.A.R.) *Egypt. J. Appl. Sci.* 5(7): 277-287.
- DUBAIE, A. S. & A. A.-W. AL-KHULAIIDI (1991). Studies on the genus *Acacia* Mill. in Yemen. *Bull. Fac. Sci. Assiut Univ.* 20(1D): 43-62.
- EL-MONAYERI, M., A. A. ALHUBAISHI, A. S. DUBAIE & A. N. GIFRI (1991). Habitats and vegetation of Wadi Dahr, Sana'a Yemen. III. The Wadi bed ecosystems. *Bull. Fac. Sci. Assiut Univ.* 20(D): 25-42.

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