



جامعة ستاردوم

مجلة ستاردوم العلمية للدراسات الطبيعية والهندسية



— مجلة ستاردوم العلمية للدراسات الطبيعية والهندسية —
تصدر بشكل نصف سنوي عن جامعة ستاردوم
المجلد الثاني | العدد الأول - لعام 2024م
رقم الإيداع الدولي : ISSN 2980-3756





**Peer Reviewing Committee of Stardom Scientific
Journal of Natural and Engineering Sciences**

Head Of Committee

Prof. Taha Elwi - Iraq

Manager Of Committee

Prof. Abbas Al-Azzawi - Iraq

Language Editor

Mrs. Laila Hussein Al-Eyan - Turkey

Member of Committee

Prof. Ali Saegh - Iraq

Eng. Saeed Ahmed - Philistine

Prof. Hayder H. Al-Khaylani - Iraq

Dr. Salem Saleh Barahmah - Yemen

Prof. Ali Abdulmajeed Ali Ahmed - Yemen

Prof. Mohammed Moqbil - Yemen

**All literary and artistic property rights are reserved to
Stardom Scientific Journal of Natural and Engineering Sciences**

- ▶ Unlocking the Cholesterol Content: A Comprehensive Analysis of Cholesterol Levels in Dairy Products, Fats, and Oils Through High-Performance Liquid Chromatography

Mokhtar S. S. Al - Salimi-Fares S. S. Al-Saidi - Adel A. M. Saeed

- ▶ Bilateral Generating Functions for the Two-Parameter, Three-variable Srivastava polynomials

Dr. Salem Saleh Barahmah

- ▶ A new extended beta function involving generalized mittag-leffler function and it's Applications

Dr. Salem Saleh Barahmah

◀ تربية و زراعة بعض أنواع النحل البري الملقح لطيف واسع من النباتات

أ.د. عبدالسلام محمد - Prof:Abdoalsalam mohamed gaool Al-Hjry

◀ مقال بحثي في كيمياء تحليل البيئة

دراسة بعض الصفات الفيزيوكيميائية والملوثات غير العضوية للمياه العادمة الناتجة من مدبغة لودر للبيئة المجاورة

جمال أحمد عبدالله الدهبلي - علي ناصر أحمد الكوم - عادل أحمد محمد سعيد

- ▶ Flora Abyan governorate

Abdul-Nasser Al-Gefr1i

- ▶ Investigation of the Absorbing the Crash Impact of Car Accedient Due Tube Inversion

Eng. Abdulhakim Hamood Ahmed Abdulwahid-Dr. Fawaz Ahmed Ghaleb

Noman-Eng. Nezar Nasser Ali Haithm

- ▶ Investigation of the inside temperature to arrive comfortable condition1: case study Mechanical workshop building

Dr. Fawaz Ahmed Ghaleb Noman

- ▶ FIELD BALANCING FOR SINGLE BLADE FAN

Eng. Saleel Saeed Abdo - Prof. Dr. Ahmed Saleh Alhunaishi

Stardom Scientific Journal of Natural and Engineering Sciences

Introduction

Aims and Scope:

The stardom Scientific Journal for Natural and Engineering sciences is a journal for the publication of peer reviewed, original research for all aspects of Natural Sciences and Engineering Sciences.

This journal provides a forum for the discussion of Natural and Engineering sciences problems around the world and for the presentation of results. It is aimed only at the Natural and Engineering sciences.

Research Areas Include, but are not exclusive to:

- Biology and biomedical engineering
- Environmental Sciences
- Chemistry studies and Chemical Engineering
- Physics studies
- Material Studies
- Mathematics
- Computer Sciences and engineering
- Civil Engineering
- Area Engineering
- Environmental Engineering
- Telecommunications Engineering and networking

- Computer Engineering
- Electrical Engineering
- Agriculture Engineering
- Human-machine systems
- Space exploration
- Renewable energy
- Power systems and control
- Artificial intelligence and its applications
- Theoretical studies

Papers submitted should address Stardom Natural and Engineering sciences issues using a range of techniques e.g. case studies, observational and theoretical analyses, the application of science, engineering and technology to questions of environmental concern or mathematical and computer modeling techniques with the aim of informing both the researcher and practitioner.

Before you Begin

Conflict of interest

All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work.

Submission declaration and verification

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder.

Changes to authorship

This policy concerns the addition, deletion, or rearrangement of author names in the authorship of accepted manuscripts:

Before the accepted manuscript is published in an online issue: Requests to add or remove an author, or to rearrange the author names, must be sent to the Journal Manager from the corresponding author of the accepted manuscript and must include: (a) the reason the name should be added or removed, or the author names rearranged and (b) written confirmation (e-mail, fax, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Requests that are not sent by the corresponding author will be forwarded by the Journal Manager to the corresponding author, who must follow the procedure as described above. Note that: (1) Journal Managers will inform the Journal Editors of any such requests and (2) publication of the accepted manuscript in an online issue is suspended until authorship has been agreed.

After the accepted manuscript is published in an online issue: Any requests to add, delete, or rearrange author names in an article published in an online issue will follow the same policies as noted above and result in a corrigendum..

Role of the funding source

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

Language

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing, as well as Arabic Language is accepted.

Submission

Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts source files to a single PDF file of the article, which is used in the peer-review process. Please note that even though manuscript

source files are converted to PDF files at submission for the review process, these source files are needed for further processing after acceptance.

Referees

Please submit, with the manuscript, the names and addresses of at least three potential referees.

Preparation

Use of word-processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts.

Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text.

To avoid unnecessary errors, you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Please **do not** add line numbering to the text document.

Article structure

Subdivision - numbered sections

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Introduction

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Material and methods

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

Results

Results should be clear and concise.

Discussion

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions

The main conclusions of the study must be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Essential title page information

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be kept up to date by the corresponding author.**
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Abstract

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An

abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself. Not more 250 words.

Graphical abstract

A Graphical abstract is optional and should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership online. Authors must provide images that clearly represent the work described in the article. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531×1328 pixels (h \times w) or proportionally more. The image should be readable at a size of 5×13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files.

Highlights

High lights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Math formulae

Present simple formulae in the line of normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more

conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes

Footnotes should be used sparingly. Number them consecutively throughout the article, using superscript Arabic numbers. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article. Do not include footnotes in the Referencelist.

Table footnotes

Indicate each footnote in a table with a superscript lowercase letter.

Artwork

Electronic artwork

General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Save text in illustrations as 'graphics' or enclose the font.
- Only use the following fonts in your illustrations: Arial, Courier, Times, Symbol.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Produce images near to the desired size of the printed version.
- Submit each figure as a separate file.

Formats

Regardless of the application used, when your electronic artwork is finalized, please 'save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

EPS: Vector drawings. Embed the font or save the text as 'graphics'.

TIFF: Color or grayscale photographs (halftones): always use a minimum of 300 dpi.

TIFF: Bitmapped line drawings: use a minimum of 1000 dpi.

TIFF: Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is'.

Please do not:

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

Color artwork

Please make sure that artwork files are in an acceptable format (TIFF, EPS or MS Office files) and with the correct resolution. If, together with your accepted.

Please note: Because of technical complications which can arise by converting color figures to 'gray scale' (for the printed version should you not opt for color in print) please submit in addition usable black and white versions of all the color illustrations.

Figure captions

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (**not** on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

Tables

Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

References

Citation in text

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Web references

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

References in a special issue

Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference style

Text: Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.

Example: '..... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result'

List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.

Examples:

Reference to a journal publication:

[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Flora of Abyan governorate-Yemen

**Abdul-Nasser Al-Gefri¹, Madleen A. Obel² and
Mohammed Abdullah Hussein³**

**^{1,3},Dept.biology Faculty of education –Aden Aden
university**

**²Dept.biology Faculty of education- Abyan, Abyan
university**

Abstract:

This paper presents a comprehensive checklist of the flora of Abyan Governorate in Yemen, providing insight into the diverse plant species found in the region. The checklist is the result of extensive analysis of published papers and field trips to various localities in the governorate. It encompasses a total of 635 species, belonging to 331 genera and 89 families, and is arranged alphabetically. The topography of Abyan province is described as varying significantly, with coastal areas, northern highlands, and midel highlands, each exhibiting distinct characteristics and vegetation. The checklist serves as a valuable resource, shedding light on the rich biodiversity present in Abyan and providing a foundation for further studies and understanding of the region's flora.

Keywords: flora, Abyan, checklist, Yemen.

Introduction:

Flora in each region is the reaction of life community reaction against environment conditions and Plant growth during past times. Considering the role of distinguishing plants and its undeniable Importance in knowing natural power of environment and taking more advantages and more Reasonable from environment and its reformation (15). There is no paper distinguished the flora of Abyan , So this paper well be give an information about flora of Abyan. The topography of Abyan province varies markedly event geology, to which the region was exposed and can be divided into three main regions:

1. Northern highlands: The high-altitude which includes number of districts as Jaishan, Rusod at Yafaa, , which are more than 1500-2200meters above sea level .
2. Midel highlands: The landscape is characterized by the terrain to 750- 1500 meters above sea level, which is represented the areas extending from Al-arqoup mountains north Shuqra region and the central plateau of the governorate.
3. Coastel Areas: Includes the southern parts of Abyan governorate, which is ranging from 1- 750 meters above sea level. (7). The checklist itself provides a detailed account of the various plant species, categorized by family, with a focus on their distribution in different localities with in Abyan Governorate

,The species are meticulously documented, including their scientific names . synonyms, and specific habitats. The document also provides insight into the cultivated plant species found in Abyan.

Methods and Materials:

The methods and materials section outlines the basis for the checklist, which .was derived from field trips and literature on the flora of Abyan Governorate

The checklist was based on several field trips to various localities in the governorate also based on published literature about the flora of Abyan Gov. (1,2,3, 4,5, 6, 8,9,10, 11,12,13, 14, 16, 17, 18, 19, 20, 21,22,).

Results and discussion:

The results and discussion section provides detailed insights into the specific species found in the region, offering a comprehensive overview of the diverse flora, including their habitats and distribution across different localities. The paper emphasizes the importance of this checklist as a foundational resource, highlighting the lack of previous comprehensive surveys or studies on the flora of Abyan. It underscores the value of this study in providing crucial information about the flora of the region and serving as a step towards a comprehensive understanding of the plant life in Abyan.

The checklist itself provides a detailed account of the various plant species, categorized by family, with a focus on their distribution in different localities with in Abyan Governorate. The species are meticulously documented, including their scientific names, synonyms, and specific habitats. The document also provides insight into the cultivated plant species found in Abyan,

The checklist comprises 635 species belong to 331 genera and 89 families, all are arranged alphabetically. The difference in altitude and distance from sea level leads to variability and variation of vegetation (17). There were no surveys or studies to verify the structure of the study area, so that we hope that this study will be give value information about the flora of Abyan. we hoped that this checklist might serve as a step toward a comprehensive flora of Abyan.

The checklist of the flora of Abyan:

Acanthaceae :

Acanthus arboreus Forssk

Lawder dist. Modia Dist., Yaffa,
rocky habitats and plains

of the coastal area of Abyan,

Anisotes trisulcus (Forssk). Neas
rocky habitats Of Abyan, Modia,
Lawder, stony mountain side

Yabraq-al-wadheea, Yafaa,

Barleria acanthoides Vahl.

al Faydh-Lawder,

Barleria bispinosa (Forssk.)Vahl.

(syn. *B. spinicyma* Nees).

Abyan Delta,Uper Abyan \dery and
stony mountain side,

Barleria farinose Delf.\

rocky habitats and plains of the
coastal area of Abyan

Barleria prionitis L. subsp.
appressa (Forssk.)

Barleria proxima Lindau.

(syn. *B. smithii* Rendle).

Yabraq-Al-wadheea,yafaa,Lawder
dist., Modia Dist.,

rocky habitats and plains of the
coastal area of Abyan

Barleria trispinosa(Forssk.) Vahl.

(syn. *B. dicantha* Nees).

Yabraq-Al-wadheea,

Blephoria ciliaris(L.) B . L . Burt

(syn. *Acanthus imbricatus*
Edgworth, *B. edulis* (Forssk.)Pers.,
B. edulis (Forssk.)Pers. var.
congesta, *B. persica*
(Burm.f.)Kuntz).

Lawder dist.,Modia Dist, rocky
habitats and plains ,Yafaa

of the coastal area of Abyan

Blepharis edulis Forssk

Yabraq-al-wadheea,

Blepharis linariifolia Pers j

Lawder dist, rocky habitats and
plains of the coastal area of Abyan

Ecbolilum viride (Forssk.)Alston.

(syn. *E. linnaeanum* Kurz.)

Justicia areysiana Defl.

Al Arays,

syn. *J. bentii* V.A.W.Graham)

Lawder dist , Modia dist.,Yabraq-
Alwadheea,Abyan

Hypoestes forskalei (Vahl)Sol. ex
Roem. & Schult.

yafaa

Justicia flava (Vahl)Vah

(syn. *J. sulcata* Vahl).

Yabraq-Al-wadheea

Justicia odora (Forssk.) Vah

Yabraq-Al-wadheea,

Al

Maraqisha

Ruellia discifolia Oliv

Yabraq-Al-wadheea, Lawder

Ruellia grandiflora (Forssk.)

Blatter

(syn. *R. longiflora* vahl)

rocky habitats and plains of the coastal area of Abyan

Ruellia longicalyx Defl.

J. Al Arays,

Ruellia patula Jacq.

(syn. *R. pallida* Vahl).

Yabraq-Al-wadheea, Modia
Dist, Lawder dist. Yafaa,

Actiniopteridaceae:

Actiniopteris radiaa (Swartz) Link

J. Al Arays

Adiantaceae:

Adiantum incisum Forssk.

J. Al Arays, Yabraq-al-wadheea,

Aizoaceae:

Aizoon canariense L.

(syn. *Glinus chrystallinus* Forssk).

rocky habitats ,Lawder dist.,
Yabraq-al-wadheea

and plains of the coastal area of
Abyan,

Gisekia pharnaceoides L.

(syn. *pharnaceum occultum*
Foessk.)

Modia dist., Lawder dist, Abyen,
coastal areas

Glinus lotoides L.

(syn. *Mollugo glinus* A.R.Rich, M.
hirta Thunb).

rocky habitats, Modia dist.,
Lawder dist,

and plains of the coastal area of
Abyan,

Trianthema crystallina (Forssk.)
Vahl.

Modia dist., Lawder dist, Yabraq-
al-wadheea

Trianthema portulacastrum L.

Modia dist. Lawder dist, Yabraq –
Alwadheea,

Trianthema triquetra Wild .

Modia dist., Lawder dist,

Aloeaceae:

Aloe ahmeransins Favell ,
M.B.Mill & Al- Gifri

Lawder dist, Modia dist.

Aloe abyssicola Lavr. & Balaidi

J. Al Arays,

Aloe fleurentinorum
Lavranos.L.E.Newton

Lawder dist, Modia dist.,

Aloe inermis Forssk

Yabraq-Al-wadheea,\ Lawder
dist, Yafaa,

Aloe lanata T.A.McCoy & Lavranos

. Yabraq-Al-wadheea ,Lawder dist., Modia dist.

Aloe perryi Baker

Yafaa,

Aloe sabaia Schweinf

(syn. *A. gillilandii* Reynolds).

Lawder dist., Modia dist., Yafaa,

Aloe serriyensis Lavr.

J. Al Arayis,

Aloe splendens Lavr.

Yabraq-Al-wadheea

Aloe vacillans Forssk

(syn. *A. dhalensis* Lavr., *A. audhalica* Lavr. & Hardy).

Yabraq-Al-wadheea, Lawder dist. Modia dist.,

Aloe vera (L.) Burm .f

Lawder dist., Modia dist.,

Amaranthaceae:

Achyranthes aspera L.

Lawder dist., Modia dist.,Abyan, Yabraq-Al-wadheea,

Aerva javanica (Burn.f.) juss

(syn. *A. persica* (Burm.f.)Meur, *A. tomentosa* Forssk.).

\Weed in several localities in Abyan Gov.

Aerva lanata (L.) Juss

(syn. *Achyranthes villosa* Forssk., *Amaranthus lanatus* A.L.Juss

var. *rotundifolia* Moq.,*A. lanatus* var. *viridis*)

Yabraq-Al-wadheea,

Alternanthera pungens Kunth.

(syn. *A. repens* (L.) Steud).

weed in lawder,

Amaranthus ascendens Lois

(syn.. *A. lividus* L, *A. blitum* L).

weed in Yafaa , Lawder dist., Yabraq-al-wadheea, Abyan,Modia ,Abyan,

Amaranthus chlorostachys WILLD.

Lawder, yafaa,

Amaranthus gracane .L.

Yabraq-Alwadheea, Modia dist.,

Amaranthus graecizan L.

(syn. *A. ansustifolius* Lam subsp. *aschersonianus* Thell,

A. angustifolius Lam. var. *graecizans* (L.)Thell.)

Abyan , yafaa ,Lawder, Modia, Yabraq-Al-wadheea

Amaranthus lioides L.

Modia dist.,

Amaranthus sparganiocephalus Thell

Abyan,
Amaranthus spinosus L.
 Abyan, Yabraq-Al-wadheea,
Amaranthus tricolor L.
 (syn. *A. mangostanus* L., *A. gangeticus* L., *A. tristis* L.)
 Lawder ,
Amaranthus viridis L.
 (syn. *A. gracilis* Desf.).
 Lawder, Modia dist., Abyan,
 Yabraq-Al-wadheea,
Digera muricata (L.) Mart.
 (syn. *D. arvensis* Forssk.)
 Abyan , Yafaa, Lawder, Modia
 dist., Yabraq-Al-wadheea
Pupalia lappacea (L.) Juss.
 Lawder, Al Maraqisha, Yafaa
Saltia papposa (Foessk.) Moq
 (syn. *Achyranthus papposa*
 Forssk.)
 Abyan,
Anacardiaceae:
Mangifera indica L.
 Cultivated in Abyan, Lawder ,
 Modia,
Rhus flexicaulis Baker
 Modia, Lawder, Abyan,
Rhus villosa L.

J. Al Maraqisha, Abyan,
Schinus mole L. Introduced.
Annonaceae :
Annona squamosa L.
 Cultivated in Abyan, Modia,
 Lawder
Apiaceae:
Anethum graveolens L.,
 Cultivated
Coriandrum sativum L.
 Cultivated
Conium maculatum L.
 Yabraq-Alwadheea,
Cuminum cyminum L.
 Abyan, Modia,
Daucus carota L.
 Cultivated.
Foeniculum vulgare Mill.
 Cultivated
Apocynaceae:
Adenium obesum (Forssk.) Roem.
 & Schult
 (syn. *A. arabicum* Balf.f., *A. micranthum* Stapf.).
 rocky habitate In Abyan, Modia,
 Lawder, Yabraq-Alwadheea, Yafaa
Catharanthus roseus Don
 (syn. *Vigna rosea* L.)

| | | |
|--|------------------|---|
| Introduced, gardens | | Common at different localities.of |
| <i>Nerium oleander</i> L. | | Abyan Gov. |
| Introduced, gardens | | <i>Caralluma awdaliana</i> (Defl.) |
| <i>Thevetia</i> | <i>peruviana</i> | Meve & Liede |
| (Pers.)K.Schum | | Lawder,Modia, Yabraq- |
| Introduced, gardens | | Alwadheea, |
| Arecaceae : | | <i>Caralluma adenensis</i> (Defl.) |
| <i>Cocos nusifera</i> L. | | Schum. |
| Cultivated | | J.Alareys, Abyan , Yabraq- |
| <i>Hyphaene thebaica</i> (L.) Mart | | Alwadheea, |
| Coastal areas | | <i>Curalluma anemoniflora</i> |
| <i>Phoenix dactylifera</i> L. | | (DEFLERS) BERGEX |
| Cultivated | | J.Alareys, |
| <i>Wissmania carinensis</i> Chiov. | | <i>Caralluma chrysostephana</i> (defl.) |
| Introduced | | Burg |
| Aristolochiaceae: | | J. Alareys,Upper Abyan In the |
| <i>Aristolochia bracteolata</i> Lam. | | Wadis, Yabraq-Alwadheea, |
| Abyan ,Yafaa ,Lawder, | | <i>Caralluma cicatricose</i> (Defl.) |
| Modia,yabraq-Alwadheea | | N.E.Br |
| Asclepiadaceae: | | J.Alareys,Abyan, Yabraq- |
| <i>Angolluma</i> | | Alwadheea,Yafaa, |
| <i>commulata</i> (A.Berger)Plowes | | <i>Caralluma deflersiana</i> (Defl.) |
| Lawder, Modia, | | Bergor. |
| <i>Blyttia spiralis</i> (Forssk.) D.V. Field | | Lawder, Yabraq-Alwadheea,Yafaa, |
| &Wood | | <i>Caralluma edulis</i> (.Edgw.) Benth |
| Abyan, | | Yabraq-Alwadheea, |
| <i>Calotropis procera</i> Ation.F. | | <i>Caralluma hexogona</i> lav |
| | | Lawder, Yabraq-Alwadheea,, |
| | | <i>Caralluma penicellata</i> (Defl.)N. E. |
| | | Br. |
| | | Upper Abyan Stony hillsides. |

| | |
|---|--------------------------------------|
| <i>Caralluma plicatiloba</i> Lav. | <i>Duvalia anemoniflora</i> |
| Lawder, | (Delf.)R.A.Dyers & Lavr |
| <i>Caralluma quadrangula</i> (Forssk.) | (syn. <i>Caralluma anemoniflora</i> |
| N. E. Brown. | (Defl.)Burg). |
| J. Alarer\ys, Yabraq- | J. Al Arays |
| Alwadheea,Yafaa | <i>Duvalia sulcata</i> N.E.Br. |
| <i>Caralluma solenophora</i> lavranos | Lawder, |
| Lawder, | <i>Glossoniema varians</i> (Stocks) |
| <i>Ceropegia arabica</i> H . Huber | Benth. ex Hook. f. |
| Lawder, Modia, | (syn.G. arabica Deflers, G. edule |
| <i>Ceropegia botrys</i> K. Schum | N.E.Br.). |
| Lawder, Modia | Yafaa, Yabraq-Alwadheea, |
| <i>Ceropegia dolichocarpa</i> | <i>Gomphocarpus fruticosus</i> (L.) |
| (O.Schwartz)Thullin and Al- | W.T.Aiton |
| Hawshabi | Yafaa, Lawder, Modia, |
| Modia | <i>Huernia lodarensis</i> Lav. |
| <i>Cerapegia rupicola</i> Deflers | Lawder, |
| Lawder, Modia, | <i>Huernia marnieriana</i> Lav. |
| <i>Ceropegia subaphylla</i> K. | Lawder |
| Schuhmann. | <i>Leptadenia arborea</i> (Forssk.) |
| Yabraq-Alwadheea, | Schweinf |
| <i>Ceropegia variegata</i> Del. | Abyan , Yabraq-Alwadheea, |
| (syn. <i>C. tubulifera</i> Deflers, <i>C. de-</i> | <i>Leptadnia pyrotechnica</i> |
| <i>vecchii</i> Chiov.). | (Forssk.)Decne |
| Lawder,Modia, Yabraq- | Lawder, Modia, Abyan, Yabraq- |
| Alwadheea,, | Alwadheea, |
| <i>Desmidorchis peniceiatla</i> (Defl.) | <i>Monolluma quadrangular</i> |
| Plowes | (Forssk.) Plowes |
| Lawder, Modia, Yabraq- | Lawder, Modia, Yabraq- |
| Alwadheea, | Alwadheea, |

Pentatropis nivalis
(Gmel.)Field&Wood

(syn. *Asclepias forskalei* Roem. & Schult., P. *spinalis* (Forssk.)Decne.).

Abyan, Yabraq-Alwadheea,

Pentatropis spiralis (Forsk.)Decne

Abyan Coast.

Pergularia deamia (Forssk.) Choiv.

(syn. *Daemia angolensis* Decne, P. *extensa* (Jacq.)N.E.Br., P. *glabra* Forssk.).

Modia, Yafaa

Pergularia tomentosa L.

Abyan ,Yafaa, Lawder, Modia,

Rhytidocaulon macrolobum Lavr.

Lawder, Yabraq-Alwadheea,

Sarcostemma forskalianum
Schult.

Lawder, Yabraq-Alwadheea, yafaa

Sarcostemma viminala(L) K Br.

(syn. S. *stipitaceum* (Forssk.)Schult.)

Upper Abyan, Modia, Yabraq-
Yabraq- Alwadheea, Yafaa

Stultitia araysiana Lavr. & Bilaidi
* (3,4)

J. Al Arayes

Asparagaceae:

Asparagus africanus Lam

Abyan ,Yabraq-Alwadheea

Asteraceae:

Artemisia abyssinca Sch.Bip. ex
A.Rich

Modia

Calendula micrantha TINEO et
Guss.

Cirsium vulgare (Savi)Ten

(syn. *C. lanceolatum* (L.)Scop.).

Yafaa, Abyan,

Conyza bonariensis(L.)Cronquist

Lawder,

Conyza linifolia WILLD

weed in abyan,

Conyza stricta WILLD

Abyan,

Eclipta prostrata (L.)

(syn. *E. alba* (L.)Hassk.).

Yabraq-Alwadheea, Lawder,

Echinops erinaceus Kit Tan

Yabraq-Alwadheea,

Flaveria trinervia (Spreng.) Mohr.

Lawder, Yabraq –Alwadheea,
Abyan, Modia,

Francoeuria crispa (FORSK)

Lawder, Abyan,

| | | |
|--|---------|---|
| Helichrysum (Klatt.)Moes. | pumilum | J. Al Arayes |
| Yabraq-Alwadheea, <i>Guizotia scabra</i> (Vis.)Chiov. (syn. <i>G. schultzii</i> Hochst. ex Sch. Bip.). | | <i>Launae capitata</i> (Spreng) Dandy (syn. <i>L. glomerata</i> (Jaub & Spach)Hook, <i>Sonchus mareoticus</i> Delile). |
| Modia, Lawder, <i>Iphionia scabra</i> DC. | | Abyan,Yafaa, <i>Launaea hafunensis</i> CHIOV. (syn. <i>L. cufodontii</i> Lanza). |
| Abyan,Yabraq-Alwadheea,Abyan, <i>Kleinia anteuphorbium</i> (L.) Haw Modia, Lawder | | <i>Launaea intybacea</i> (Jacq.)Beauverd Yafaa |
| <i>Kleinia odora</i> (Forssk.) A. Berger. (syn. <i>Senecio odorus</i> (Forssk.)Schultz). | | <i>Launaea massauensis</i> (Fresen)Sch (syn. <i>L. kuriensis</i> Vierh., <i>L.</i> <i>lactuoides</i> (T.Ander.)E.H.L.Krause., <i>Brachyrhamphus lactuoides</i> T.Ander., <i>Heterachaena</i> <i>massaviensis</i> Fresen.,) |
| Yabraq-Alawdheea,Abyan, <i>Kleinia pendula</i> (Forssk.) DC. (syn. <i>Senecio pendulus</i> (Forssk.)Schultz-Bip.) . | | Abyan ,Yafaa, <i>Launaea nudicaulis</i> (L.) Hook. f. (syn. <i>Lactuca nudicaulis</i> (L.)Murray, <i>Lomatolepis</i> <i>nudicaulis</i> (L.)Cass) |
| yabraq-Alwadheea, <i>Kleinia semperviva</i> (Forssk.) DC. (syn. <i>Senecio semperviva</i> (Forssk.)Sch.Bip.). | | Abyan, Yafaa, <i>Launaea procumbens</i> (Roxb.) Ramayya & Rajgopal |
| Yabraq-Alwadheea,Lawder, <i>Lactuca sativa</i> L. Cultivated. | | (syn. <i>L. fallax</i> (Jaub. & Spach)Muschl., <i>Lactuca obtuse</i> (DC.)Mundhe & Almeida, <i>Prenanthes procumbens</i> Roxb.), |
| <i>Lactuca serriola</i> L. Yafaa , Abyan,Lawder, <i>Launaea almahrahensis</i> N.Kilian | | |

- Abyan ,Yafaa, Yabraq-Alwadheea,
Onopordon arabicum Podl. (in
Mitt. Bot. Munchen
(syn. *O. carmanico*
(Bornm.)Bornm
Yafaa, Abyan
Onopordon sibthorpiatum Boiss
and Helder
Abyan,Yafaa, Modia, Lawder,
Pluchea dioscoridis (L.) DC.
Yabraq-Alwadheea, Modia,
Lawder, Abyan,Yahaa
Pluchea indica (L.) Less. subsp.
Indic
Abyan,
Pluchea ovalis (Pers) DC.
Modia, Lawder,
Psiadia arabica Jaub. Et. Spach
Yabraq-Alwadheea,
Psiadia punctulata (DC.)Vatke
(syn. *P. arabica* Jaub & Spach).
Yafaa, Lawder,
.
Pulicaria crispa (Forssk.) Benth
Modia
Pulicaria jaubertii Gamal-Eldin
(syn. *P. orientalis* Jaub. & Spach.).
Yafaa, Yabraq-Al-wadheea,
Abyan, Modia, Lawder,
- Pulicaria orientalis* JAUB. et
SPACH
Weed in Abyan
Pulicaria petiolaris Jaub. & Spach
Yabraq-Alwadheea
Pulicaria schimperi DC.
(syn. *P. ehrenbergiana* Schult.
Bip., *P. rueppelii* Schul-Bip.)
Yabraq-Alwadheea,
Pulicaria somalensis O. Hoffm.
subsp. *schweinfurthii* Gamal-Eldin
(syn. *P. adenensis* Schweinf., *P.*
glutinosa Jaub. & Spach.
Yabraq-Alwadheea,
Pulicaria undulata (L.) C. A. Mey.
(syn. *P. crispa* (Forssk.)Benth. &
Hook., *Francoeria crispa*
(Forssk.)Cass.).
YabraqAlwadheea,Abyan,Modia,L
awder,
Reichardia tingitata (L.)Roth.
Yafaa, Abyan,
Senecio odorus (FORSK.)
CHULTZB IP.
Abyan,
Sonchus oleraceus L.
Yabraq-alwadheea, Abyan ,Modia,
Lawder
Sonchus tenerrimus L.
Lawder,

| | |
|--|---|
| <i>Tarchonanthus camphoratus</i> L. | Yafaa, 'Modia, |
| Abyan ,J. Al Arayes | <i>Cordia ovalis</i> R.Br.ex.Dc |
| <i>Urospermum picroides</i> (L.) | (syn. <i>C. dioica</i> Boj.). |
| SCHMID | Abyan, J. Al Arayes, Al Maraqisha. |
| Weed in Abyan, | <i>Heliotropium aegyptiacum</i> Lehm. |
| <i>Vernonia cinerea</i> (L.) Less. | Yabraq -Alwadheea |
| Yabraq- alwadheea, Lawder, | <i>Heliotropium bacciferum</i> Forssk. |
| <i>Vernonia arabica</i> F. G. Davies | (syn. <i>H. undulatum</i> Vahl) |
| <i>Vernonia areysiana</i> Defl. | Lawder, Modia, |
| J. Al Arayes | <i>Heliotropium bottae</i> Jaub et. |
| Yabraq-Alwadheea | Abyan, |
| <i>Vernonia spatulata</i> (Forssk.) Sch- | <i>Heliotropium curassavicum</i> L |
| Bip ex Asch. | Yabraq-Alwadheea |
| Yabraq-Alwadheea,Abyan, | <i>Heliotropium eurapaeum</i> L |
| <i>Xanthium brasiliicum</i> Vell. | Abyan, Yabraq-Alwadheea, |
| Yabraq-Alwadheea, | Lawder, Yafaa |
| <i>Xanthium spinosum</i> L. | <i>Heliotropium lasiocarpum</i> |
| Yabraq-Alwadheea,Abyan | Fiscer&C.A.Mey |
| ,Modia, Lawder,Yafaa | Yafaa, Lawder |
| <i>Xanthium strumarium</i> L. | <i>Heliotropium longiflorum</i> A. DC.) |
| Yabraq-Alwadheea, Abyan, | Jaub. & |
| Modia,Lawder | Spach var. <i>longiflorum</i> |
| Balanitaceae: | Yafaa, Abyan, Modia, Lawder, |
| <i>Balanites aegyptiaca</i> (L.) Delile | Yabraq-Alwadheea |
| var. <i>aegyptiaca</i> | <i>Heliotropium pterocarpum</i> (D.C.) |
| Yafaa, Abyan, Lawder, Modia, | 98 Steud.Hochst.ex.Bunge. |
| Boraginaceae: | Abyan,Yabraq-Alwadheea |
| <i>Alkanna orientalis</i> (L.) Boiss. | <i>Heliotropium ramoissimum</i> |
| | (Lehm)Sieber ex DE |

(syn. *H. persicum* Boiss).

Abyan,

Heliotropium rariflorum Stocks

Yabraq-Alwadheea,
Modia, Abyan, Yafaa

Heliotropium strigosum Willd.

Al Maraqlsha

Heliotropium supinum L.

Wedd in Lawder,

Heliotropium zeylanicum (Burm)
Lam

(syn. *H. subulatum* (DC.) Martelli).

Modia, Abyan,

Trichodesma africanum (L.) R.Br.

Abyan,

Brassicaceae:

Brassica oleracea L.

Cultivated

Capsella bursa-pastoris (L.)
MEDIK

Yafaa,

Diploaxis acris (FORSK.) B.ow.

(syn. *Malcolmia arabica* Velen.)

Yafaa,

Diploaxis eruroides L. DC

Yafaa, Modia, Lawder,

Diploaxis harra (Forssk.) Boiss

Lawder

Eruca sativa Miller

Cultivated.

Erucastrum arabicum Fisch. et Mey

Yafaa,

Farsetia longisiliqua L.

(syn. *F. stylosa*
(Steud.) T. Anderson)

Abyan, Yabraq-Alwadheea,

Farsetia linearis Dene ex Boiss

Yabraq-Alwadheea,

Farsetia stylosa R.Br.

(syn. *F. depressa* Kotschy, *F. hamiltonii* Royle, *F. prostrata* (Stew.) Hochst., *F. ramosissima* Hochst. Ex Fourn., *Mathiola prostrata* Hochst. & Steud. Ex Steud.).

Abyan, Modia, Yabraq-Alwadheea

Raphanus sativus L.

Cultivated

Schowia purpurea (Forssk.)
Schweinf.

(syn. *S. arabica* DC., *S. schimperi* Jaub. & Spach, *S. thebaica* Webb., *Subularia purpurea* Forssk.).

Al Faydh (Abyan), Abyan, Modia,
Lawder, Yabraq-Alwadheea

Buraceraceae:

Boswellia sacra Flueck

(syn. *B. undulato-crenata* Engl.)

Abyan, Lawder,

Commiphora abyssinica (Berg.)
Engl

Abyan-Rocky habitat.

Commiphora africana (A. Rich.)
Engl.

Al Maraqisha (Abyen), Yabraq-
Alwadheea

Commiphora foliacea Sprague

Al Maraqisha (Abyen),
Modia, Abyan,

Commiphora gileadensis (L.) C.

Abyan, Modia, Lawder

Commiphora kataf (Forssk.) Engl.

Yabraq-Alwadheea, Lawder,
Modia, Yafaa

Commiphora kua (J.F. Royle)
Vollesen

Modia, Abyan,

Commiphora myrrha (Nees) Engl.

Modia, Lawder, Yabraq-
Alwadheea

Commiphora schimperi (O. Berg)
Engl

Yabraq-Alwadheea

Cactaceae:

Opuntia ficus-indica (L.) Mill

Abyan, Yabraq-Alwadheea

Caesalpinaceae:

Caesalpinia bonduc (L.) Roxb

Cultivated: Abyan,

Delonix elata (L.) Gamble

(syn. *Poinciana elata* L.).

Abyan, Modia, Lawder, Yabraq
Alwadheea

Parkinsonia aculeata L.

Yabraq-Alwadheea, Abyan,

Senna alexandrina Mill

Yabraq-Alwadheea, Abyan,
Lawder, Modia

Senna auriculata (L.) Roxb.

Modia, Lawder, Abyan

Senna holosericea (Fresen.) Greuter

Lawder, Modia, Abyan

Senna italica Mill.

(syn. *Cassia italica* (Mill.) Lam. ex
Steud., *C. obovata* Collas.).

Abyan,
Modia, Yafaa, Lawder, Yabraq-
Alwadheea

Senna occidentalis (L.) Link

Lawder, Abyan, Yabraq-Alwadheea

Tamarindus indica L.

Modia, Abyan

Capparaceae:

Bosacia arabica Pestalozzi

Southern coast near Shuqra
Cadaba farinosa Forssk
 weed in Abyan,
 Modia, Yafaa, Lawder
Cadaba glanduloslawder, a Forssk.
 Yabraq-Alwadheea, Abyan,
Cadaba hetirotricha Stocks
 Yabraq-Alwadheea,
Cadaba rotundifolia Forssk.
 Lawder, Abyan, Yafaa, Yabraq-
 Alwadheea
Capparis cartilaginea Forssk.
 (syn. *C. galeata* Fres., *C. galeata*
 Fres. Var. *montana* Schweinf.,
C. spinosa L. var. *galeata*
 (Fresen.) Hook.f. & Thoms).
 Abyan, Modia,
 Lawder, Yafaa, Yabraq-Alwadheea
Capparis decidua (Forsk.) Edgew
 (syn. *C. aphylla* Roth., *Sodada*
deciduas Forssk.)
 Abyan Coastal plains
Capparis orientalis Duham
 Abyan,
Capparis spinosa L.
 (syn. *C. aegyptia* Lam., *C. spinosa*
 L. var. *aegyptia* (Lam.) Boiss,
C. spinosa L. var. *canescens*
 Cosson., *C. leucophylla* DC.)

Yabraq-Alwadheea, Modia
Dipterygium glaucum Decne.
 (syn. *D. glaucum* Decne. Var.
macrocarpa Blatter, *Cleome pallida*
 Kotschy)
 Abyan, Lawder, Modia, Yabraq-
 Alwadheea, Yafaa
Maerua crassifolia Forssk.\
 Almaraqsha
 (syn. *M. uniflora* Vahl, *M. arabica*
 J.F.Gmel., *Wiegmannia arabica*
 (J.F.Gmel.) Hochst. & Steud. Ex
 Steud)
 Lawder, Modia, Abyan, Yabraq-
 Alwadheea, Yafaa,
Maerua angolemsis DC.
 Yabraq-Alwadheea, Abyan, Yafaa
Caricaceae:
Carica papaya L.
 Cultivated
Caryophyllaceae:
Cometes abyssinica R. Br
 (syn. *C. abyssinica* R.Br. subsp.
suffruticosa Wagn. & Vierb.).
 Yabraq-Alwadheea, Abyan,
Polycarpaea repens (Forssk.)
 Asch.&Schwein
 Modia,
Polycarpaea spicata Wt. et Arn.
 Yabraq-Alwadheea, Abyan,

Sterllaria pallid (Dumort.) Pire

Modia

Vaccaria hispanicu (MILL.)R

AUSCHERTW

Yafaa,

Casuarinaceae:

Casuarina equisetifolia L.

Introduced; road side & gardens

Celastraceae:

Catha edulis Forssk.

Yafaa

Chenopodiaceae:

Arthocemum glaucum (Del.) Ung

.Sternb

Abyan,

Caroxylon imbricatum (Forssk.)

Moq.

Abyan,

Caroxylon spinescens (Moq.)

Akhani & Roalson

Abyan,

Chenopodium album L.

Yafaa, Lawder, Modia

Chenopodium botrys L

Yafaa , Lawder,Modia

Chenopodium murale L.

Lawder, Modia

Chenopodium schraderianum

Roem&Schultes

Modia, Lawder,

Halothamnus bottae Jaub.&Spach

Modia, Lawder,

Salsola imbricata Forssk

(syn.*Caroxylon imbricatum*

(Forssk.)Moq., *Chenopodium*

haryosmon Roemer & Schultes,

Salsola foetida Del. Ex Spren., S.

foetida Del. Ex Spren. Var. *gaeula*

Maire., S. *baryosma* (Roem. &

Schult.)Dandy).

Modia

Salsola forskali Forssk.

Abyan,Yabraq--Alwadheea

Salsola spinescens Moq

(syn. *S. aethiopica* Botsch., S.

forskahlii Schwarzf.)

Yabraq-Alwadheea, Lawder

Salsola tetrandra Forssk.

Abyan,

Suaeda aegyptiaca (Hasselq.)

Zohary\ Coastal zone

Yabraq-Alwadheea, Lawder, Abyan

Suaeda fruticose Forssk

.exJ.F.Gmel

Coastal zone, Modia, Lawder

Suaeda monoica Forssk.

Coastal zone

Suaeda vermiculata Forssk..
 (syn. *Salsola mollis* Desf. *Suaeda fruticosa* Forssk. Ex J.F.Gmelin,
S. mollis (Desf.)Del., *S. paulayana* Vierh., *S. volkensii* C.B.Clarke,
S. monodiana Maire, *S. mesopotamica* Eig)

Coastal zone of Abyan

Traganum nudatum DEL

Abyan,

Cleomaceae:

Cleome brachycarpa(Forssk.)Vahl. ex.Dc.
 (syn.*C. brachycarpa* Vahl. ex DC.
 Var. *filicaulis* Schweinf.,
C. brevisiliqua Schultesf., ? *C. diversifolia* Hochst. & Steud.).

Abyan,Yabraq-Alwadheea
 ,J.Alareys

Cleome glaucescens DC.

Yabraq—Alwadheea,Abyan,

Cleome gynandra L.

(syn. *C. pentaphylla*
L.,Gynandropsis gynandra
 (L.)Briq.,

G. pentaphylla (L.)DC.,
Pedicellaria gynandra
 (L.)Schränk.)

Yabraq-Alwadheea

Cleome noeane Boiss

Abyan,

Cleome paradoxa R. Br.,
 (syn. *C. brachystyla* Defl.)

Lawder,Abyan,

Cleome scaposa DC.

(syn. *C. papillosa* Steud.)

Yabraq-Alwdheea,Abyan

Cleome viscosa L.\

Weed in Abyan, Yabraq-Alwdheea,

Combretaceae:

Conocarpus lancifolius.Engl.

Cultivated in Abyan

Terminalia brownie Fresen

Modia

Terminalia catappa L

Cultivated

Commelinaceae:

Aneilema forskolii Kunth.

Yabraq-Alwadheea,

Commelina albescens Hassk

Yafaa

Commelina bengalensis L.

yabraq-Alwadheea,Abyan,Lawder

,

Commelina imberbis Ehrenb. ex Hassk

Modia

Convolvulaceae:

Convolvulis arvensis L.

Yabraq-Alwadheea, Abyan,
Modia, Lawder

Convolvulis fatmensis kunze

Yabraq-Alwadheea, Abyan,

Convolvulus glomeratus Choisy

(syn. *C. arabicus* Hochst.)

Yabraq-Alwadheea, Modia,
Lawder,

Cressa cretica L.

Abyan,

Ipomoea batatas (L.) Lam

Cultivated.

Ipomoea eriocarpa R. BR

Abyan,

Ipomoea pes-caprae (L.) R. BR.

(syn. *I. biloba* Forssk.).

Yabraq-Alwadheea

Seddera intermedia Hochst. &
Steud

Yafaa, Lawder

Crassulaceae:

Kalanchoe bentii Hook. f. subsp.
Bentii

(syn. *K. deflersii* Gagnep., *K.*
teretifolia Defl.).

Yabraq-Alwadheea,

Cucurbitaceae:

Bryonia cretica L

Lawder,

Citrullus colocynthis (L.) Schrad.

Yabraq-Alwadheea, Modia,
Lawder, Abyan Yafaa

Citrullus vulgaris Schrad.

Modia

Carallocarpus glomeruliflorus
(Defl.) Cogn.

Yabraq-alwadheea

Coccinia grandis (L.) Voigt.

(syn. *C. moghadd* (Gmel.) Scheinf.,
C. inedulii Forssk.).

Yabraq-Alwadheea

Cucumis melo var *Agvestis*.
(Naud.) Grebensc

Cultivated,

Cucumis prophetarum L. subsp.
Prophetarum

Yabraq-Alwadheea, Abyan, Modia

Cucumis sativus L

Cultivated,

Cucurbita maxima Duchesne

Cultivated,

Cucurbita pepo L.

Cultivated,
Kedrostis gijef (J . f Gmel) C
.Jeffrey

Modia, Lawder,
Laginaria siceraria (Mol.)Standl.

Cultivated,
Luffa cylindrica (L.)M.J.Roem
(syn. *L. aegyptiaca* Mill.).

Modia
Luffa forsskalii schweif.

Yabraq-Alwadheea,
Momordica balsamina L

Abyan, Lawder, Modia
Zehneria anomala C. Jeffrey.

Abyan,

Cupressaceae:
Cupressus sempervirens L.

Modia

Cuscutaceae:
Cuscuta carpestris YUNCKFR

Yafaa,

Cyperaceae;
Cyperus conglomeratus Rottb.

Abyan

Cyperus leavigatus L

Abyan,

Cyperus rotundus L.

Yabraq-Alwadheea, Abyan,
Modia,

Scirpus maritimus L.

Abyan

Cynomoraceae:
Cynomorium coccineum L.

Yabraq-Alwadheea,

Dipsaceae:

Cordia myxa L

Abyan in the wadis

Dracaenaceae:

Dracaena ombet Kotschy & Peyr.

Yabraq-Alwadheea, Modia, Lawder

Dracaena serrulata Baker .

Modia, Lawder, Yafaa

Sansevieria ehrenbergii Schweinf.
ex Bak

Yabraq-Alwadheea, Lawder, Yafaa

Sansevieria forskaoliana (Schult.
f.) Hepper & J. R. I. Wood

(syn. *S. abyssinica* N. E. Br, *S.*
quinensis Willd.).

Yabraq-
Alwadheea, Abyan, Lawder, Yafaa

Euphorbiaceae:

Acalypha fruticosa (Forssk.)

Yabraq-
Alwadheea, Lawder, Modia, Yafaa

Acalypha indica R

| | |
|---|---|
| Abyan, | Lawder, Modia |
| <i>Chrozophora oblongifolia</i> (Del.).Juss | <i>Euphorbia granulata</i> Forssk. var. granulate |
| Abyan, Lawder, Modia | Yabraq-Alwadheea, Abyan, Lawder, Modia |
| <i>Chrozophora plicata</i> (Vahl.) A.Juss.ex.Spreng | <i>Euphorbia greuteri</i> N. Kilian, Kürschner & P. Hein |
| Abyan, | Al Arays, Yabraq-Alwadheea |
| <i>Chrozophora tincotora</i> (L.) A.Juss., | <i>Euphorbia hirta</i> L. |
| (syn. <i>C. obliqua</i> (Vahl.)Juss ex Spreng). | Yabraq-Alwadheea, Abyan, Lawder, Yafaa |
| Lawder, Modia | <i>Euphorbia hadramautica</i> Bak |
| <i>Euphorbia ammak</i> Schweif | Yabraq-Alwadheea |
| Lawder, | <i>Euphorbia helioscopia</i> L. |
| <i>Euphorbia arabica</i> Hochst. & Steud. ex Boiss | Abyan, |
| Abyan, | <i>Euphorbia heterophylla</i> L |
| <i>Euphorbia balsamifera</i> Ait. subsp. adenensis (Defl.) Bally | Abyan |
| Yabraq-Alwadheea, Lawder, Modia, Yafaa | <i>Euphorbia hypericifolia</i> L. |
| <i>Euphorbia cactus</i> Ehrenb ex . Boiss | Abyan, |
| Lawder, Modia, Yafaa, | <i>Euphorbia indica</i> Lam. |
| <i>Euphorbia cuneata</i> Vahl subsp. Cuneate | (syn. <i>E. rosea</i> Retzius) |
| Lawder, Modia, Abyan, Yabraq- Alwadheea. | Yabraq-Alwadheea |
| <i>Euphorbia dracunculoides</i> Lam. | <i>Euphorbia inarticulata</i> Schweinf. |
| <i>Euphorbia fruticosa</i> Forssk | Yabraq-Alwadheea, Modia, Abyan, Yafaa |
| (syn. <i>E. officinalis</i> Forssk.). | <i>Euphorbia larica</i> Boiss. |
| | Yabraq-Alwadheea |
| | <i>Euphorbia longetuberculosa</i> Hochst |

- Lawder, Modia
Euphorbia peplus L.
- Lawder,
Euphorbia schimperi Presl.
- Yabraq-Alwadheea, Lawder, Modia
Euphorbia serpens Kunth
- Yabraq-Alwadheea
Euphorbia triaculeata Forssk
- Lawder, Modia
Jatropha glauca Vahl.
 (syn. *J. lobata* (Forssk.) Muell. Arg.)
- Abyan, Yabraq-Alwadheea, Lawder, Modia, Yafaa
Jatropha pelargonifolia Courb.
 (syn. *J. villosa* (Forssk.) Muell.-Arg., *J. glandulosa* Vahl).
- Yabraq-Alwadheea, Lawder, Modia, J. Alareys
Jatropha spinosa Vahl
- Abyan, Yabraq-Alwadheea, Lawder, Mudiya, Yafaa
Jatropha villosa (Forsk) Mull-Arg.
 J. Alareys, Lawder, Modia, Yafaa
- Micromera mbricatel* (Forssk.) Christen.
 Yabraq-Alwadheea,
- Phyllanthus fraternus* Webster us maderaspatensis.L.
- Lawder, Abyan,
Rhynchosia memnonia (Del.) Dc.
- Lawder,
Ricinus communis L
- Lawder, Modia, Abyan, Yafaa,
Tragia pungens (Forssk . Muell. Arg.
 (syn. *T. arabica* (Baill. ex Muell.-Arg., Prain, *T. maamarensis* Baill.).
- Modia
Fabaceae:
Alhagi maurorum. Medik
- Lawder,
Alhagi graecorum Boiss.
 (syn. *A. maurorum* Medik.).
- Abyan, yabraq-Alwadheea
Arachis hypogaea L.
 Cultivated
- Cadia purpurea* (Picc.) Ait.
 (syn. *C. varia* L'Herit.).
- Yabraq-Alwadheea, Modia, Lawder
Crotalaria incana L.
- Yabraq-Alwadheea, Lawder, Modia,
Crotalaria persica (Burm.f.)
 Yabraq-Alwadheea,

| | |
|--|---|
| <i>Crotalaria retusa</i> L. | <i>Indigofera semitrijuga</i> forssk |
| weed in Yafaa, Abyan, | Abyan, Yafaa, |
| <i>Crotalaria saltiana</i> Andr. | <i>Indigofera spiniflora</i> Boiss. |
| Yabraq-Alwadheea, Modia, | Modia, Lawder, |
| Lawder, Yabraq-Alwadheea, | <i>Indigofera spinosa</i> Forssk. |
| <i>Delonix elata</i> (L.) | Yabraq-alwadheea, Modia, Lawder, |
| Abyan, | <i>Indigofera tinctoria</i> L |
| <i>Dolichos lablab</i> L | Lawder, Modia, Abyan, |
| Modia | <i>Indigofera volkensii</i> Taub. |
| <i>Flemingia congesta</i> , | Abyen near Jahin |
| Yafaa | <i>Louts garcinii</i> DC. |
| <i>Indigofera arabica</i> Jaub & Spach | Yabraq-Alwadheea |
| Yabraq-Alwadheea | <i>Medicago laciniata</i> (L.) Mill. |
| <i>Indigofera articulata</i> Gouan | Modia, Lawder |
| Yabraq-Alwadheea, Abyan, | <i>Medicago sativa</i> L |
| <i>Indigofera coerulea</i> Roxb. var. | Cultivated |
| <i>coerulea</i> | <i>Melilotus officinalis</i> (L.) Pall |
| Yabraq-Alwadheea, Abyan, Modia | Yabraq-Alwadheea |
| <i>Indigofera hochstetteri</i> Bak | <i>Ormacarpum yemenense</i> Gillett |
| (syn. <i>I. anabaptista</i> Steud.). | (syn. <i>O. bibracteatum</i> E.G. Baker) |
| Yafaa, Abyan, | Yabraq-Alwadheea |
| <i>Indigofera oblongifolia</i> Forssk. | <i>Phaseolus vulgaris</i> L |
| (syn. <i>I. desmodioides</i> E.G. Baker.). | Cultivated |
| Yabraq- | <i>Rhynchosia memnonia</i> (Del.) Dc. |
| alwadheea, Abyan, Modia, Lawder, | (syn. <i>R. minima</i> var. <i>memnonia</i> |
| Yafaa | (Del.) Cooke). |
| <i>Indigofera phillipsiae</i> Bak.f. | Yabraq-Alwadheea |
| Abyan, | |

Rhynchosia minima (L.) DC. var.
prostrata (Harv.) Meikle

Yabraq-Alwadheea

Sesbania grandiflora (L.)Poir.

Modia

Sesbania pachicarpa DC.

Yabraq-Alwadheea,Modia

Sesbania sesban (L.)Merrill

(syn. *S. punctata* DC.)

Tephrosia nubica (Boiss.) Baker

(syn. *T. pogonostigma* Boiss)

Abyan,

Tephrosia purpurea (L.)pers.
subsp. *apollinea* (Delile) Hosni &
El- Karemy

Yabraq-Alwadheea,Abyan,

Vigna unguiculata (L.)Walp

Abyan,

Geraniaaceae:

Erodium ciconium (L.)LHer.

(syn. *Geranium cicutarium* L.).

Lawder, Modia

Geranium ocellatum jacq ex.Cam

(syn. *G. muscatense* Boiss).

Yabraq-Alwadheea

Monsonia helitropoides
(Cav.)Boiss

Yabraq-Alwadheea

Hydnoraceae:

Hydnora johannis Becc.

(syn. *H. abyssinica* A.Br. ex
Schweinf.).

Parasitic on *Acacia* spp

Yabraq-Alwadheea, Lawder,Modia

Lamiaceae:

Endostemon tenuiflorus (Benth.)

M. Ashby

(syn. *Orthosiphon tenuiflorus*
Benth.).

Yabraq-Alwadheea,

Lavandula pubescens Decne.
Benth

Yabraq-Alwadheea, Lawder,Yafaa,

Leucas alba (Forssk.) Sebald

(syn.*L. royleoides* (Benth.)Guer,
Ballota forskahlei Benth.

Lasiocorys arabica Jaub. &
Spach.).

Yabraq-Alwadheea,Modia

Leucas articefolia (Vahl) Sm. var.
urticifolia

Yabraq-
Alwadheea,Modia,Lawder,

Leucas inflata Benth

Abyan,Lawder,Modia

Marrubium vulgare L.

Yabraq-Alwadheea,

| | |
|---|--|
| <i>Mentha longifolia</i> (L.)L. | Yafaa, |
| (syn. <i>M. sylvestris</i> L.) | <i>Plectranthus comosus</i> Sims |
| Modia, Abyan, | Lawder, Modia |
| <i>Mentha piperite</i> L. | <i>Salvia areysiana</i> Defl |
| Modia | Al Maraqisha (Abyen), J. Al Arayis |
| <i>Nepeta deflersiana</i> | <i>Teucrium yemense</i> Defl. |
| Schweinf.exHedge, | Yabraq-Alwadheea, |
| (syn. <i>N. rugosa</i> Benth.). | Modia, Lawder |
| Lawder, Modia | Liliaceae: |
| <i>Ocimum basilicum</i> | <i>Allium cepa</i> L. |
| L.var.purpurascens Benth. | Cultivated |
| Yabraq-Alwadheea | <i>Allium porrum</i> L |
| <i>Ocimum filamentosum</i> Forssk. | Cultivated |
| Yabraq-Alwadheea, | <i>Allium sativum</i> L |
| <i>Ocimum forskolei</i> Benth. | Cultivated |
| (syn. <i>O. gratissimum</i> Forssk., <i>O. hadiense</i> Forssk., <i>O. menthifolium</i> Hochst. ex Benth.). | Longaniaceae: |
| Lawder, Modia, Yafaa, | <i>Buddleia polystachya</i> Fresen |
| <i>Origanum syriacum</i> L . | Lawder, |
| Lawder, Modia | Loranthaceae: |
| <i>Otostegia fruticosa</i> | <i>Loranthus acaciae</i> Zucc |
| (forssk.)schweinf ex penzig | Abyan, Yafaa |
| (syn. <i>O. repanda</i> Benth., <i>O. scariosa</i> Benth). | <i>Oncocalyx doberae</i> (Schweinf.) G. |
| Yabraq-Alwadheea | R. L. Wood. |
| <i>Plectrantus barbatus</i> Andr. | (syn. <i>Loranthus doberae</i> Schweinf.). |
| (syn. <i>Coleus barbatus</i> (Andr.)Benth.). | Lawder, Modia, Yabraq-Alwadheea |

| | |
|--|---|
| <i>Plicosepalus</i> | Cultivated |
| <i>acacia</i> (Zucc.)Wiens&Polhil. | <i>Gossypium nanking</i> Meyen |
| (syn. <i>Loranthus acaciae</i> Zuce., L. | Cultivated |
| <i>arabicus</i> Deflers, | <i>Hibiscus meidiensis</i> Ulbr |
| <i>Tapinostemma acaciae</i> | Lawder,Modia |
| (Zucc.)Tiegh). | <i>Hibiscus rosa -sinensis</i> L |
| Yabraq-Alwadheea,Yafaa, | Cultivated as ornamental |
| Loasaceae: | <i>Hibiscus subshariffa</i> L. |
| <i>Kissenia arabica</i> R.Br.&Chiov | Abyan |
| Yabraq-Alwadheea, | <i>Hibiscus vitifolius</i> L. |
| Lythraceae: | Yabraq-Alwadheea,Abyan,yafaa |
| <i>Lawsonia inermis</i> L | <i>Malva praviflora</i> L. |
| (syn. <i>L. alba</i> Lam.). | Lawder, Modia, Abyan |
| Cultivated | <i>Malva rotundgoha</i> L |
| Malvaceae: | Lawder, |
| <i>Abelmoschus</i> <i>esculentus</i> | <i>Pavonia arabica</i> Hochst. ex Boiss |
| (L.)Moench | Al Faydh(Abyen), |
| Cultivated | <i>Pavonia triloba</i> Guill.&Per |
| <i>Abutilon fruticosum</i> Guill. & Perr | Lawder, Modia, Abyan, |
| Yabraq-Alwadheea,Abyan | <i>Senra incana</i> (Cav.) DC. |
| <i>Abutilon pannosum</i> (Forrsk.) | Yabraq-Alwadheea,Abyan, |
| Schlechl | <i>Sida alba</i> L. |
| (syn. <i>A. muticum</i> (Del.)Webb). | (syn. <i>S. spinosa</i> L.) |
| Yabraq- | Yabraq-Alwadheea, |
| Alwadheea,Abyan,Lawder,Modia | <i>Sida cardifolia</i> L |
| <i>Gossypium areysianum</i> DEFL. J . | Yabraq-Alwadheea, |
| J. Al Arayes, Abyen | |
| <i>Gossypium barbadense</i> L. | |

Thespesia populnea (L.) Solender
ex.corre

Introduced and naturalized as a
road side

Meliaceae:

Azadirachta indica A. Juss.

Introduced and naturalized as a
roadside

and shadeTree

Trichilia emetica (Forssk)

(syn. *T. roka* (Forssk.) Chiov.).

Abyan, Yafaa,

Mimosaceae:

Acacia asak (Forssk.) Willd.

(syn. *A. glaucophylla* Steud.).

Yabraq-Alwadheea, Abyan,
Lawder, Modia, Yafaa

Acacia edgeworthii T. Anders

(syn. *A. hunteri* Oliver).

Abyan, J. Al Arayes

Acacia etbaica Schweinf. subsp.
uncinata Brenan

Abyan, Yafaa, Lawder, Modia

Acacia ehrenbergiana Hayne

Yabraq-Alwadheea, Abyan, Yafaa,

Acacia hamulosa Benth.

Yabraq-Alwadheea, Abayn, Lawder

Acacia mellifera (Vahl.) Benth.

Yabraq-Alwadheea, Yafaa, Abyan,

Acacia nilotica (L.) Willd. ex
Delile subsp. *indica* (Benth.)
Brenan

(syn. *A. arabica* (Lam) Willd,
Mimosa sejal Forssk.).

Yabraq-Alwadheea, byan, Yafaa,

Lawder, Modia

Acacia oerfota (Forssk.) Schweinf

(syn. *A. nubica* Benth.).

Abyan,

Acacia seyal Del

Abyan,

Acacia tortilis (Forssk.) Hayne
Hayne subsp.

(syn. *A. spirocarpa* Hochst. ex A.
Rich car. *Crenata* Chiov.)

Yabraq-Alwadheea, Lawder,
Modia, Abyan, Yafaa

Albizia lebbeck (L.) Benth

Introduced planted as ornamental

Pithecellobium dulce
(Roxb.) Benth.

Introduced: road sides

Prosopis cineraria (L.) Druce

(syn. *P. spicigera* L.)

Yabraq-Alwadheea,

Prosopi juliflora (Sw.) DC.

Yabraq-Alwadheea, Lawder, Modia

Molluginaceae :

Corbichonia decumbens (Forssk.)
Exel

Yabraq-Alwadheea,

Glinus lotoides L.

Yabraq-Alwadheea,

Moraceae:

Dorstenia foetida
(Forssk.)Schweinf. & Engl

(syn. *D. radiata* Lam., Kosaria
foetida Forssk.)

Lawder,

Ficus carica L.,

Lawder, Modia

Ficus cordata L.

(syn. *F. ambigum* Forssk., *F.*
salicifolia (vahl)Berg.)

Yabraq-Alwadheea, Lawder,
Modia, Abyan,

Ficus populifolia Vahl.

Lawder,Abyan,

Ficus salicifolia Vahl.

Abyan,

Ficus sycomorus L.

(syn. *F. chanas* Forssk.)

Yabraq-Alwadheea, Lawder, Abyan

Ficus vasta (Forssk.)

Yabraq-Alwadheea, Yafaa, Abyan,

Moringaceae:

Moringa peregrine (Forssk.) Fiori

Abyan,

Musaceae :

Musa paradisiaca L

Cultivated

Myrtaceae:

Eucalyptus camaldulensis Dehnh

Introduced

Eucalyptus grandis
(Hill)ex.Maiden

Introduced

Myrtus communis L.

Cultivated in Yafaa

Psidium guajava L.

Cultivated.

Nyctaginaceae:

Boerhavia diffusa L.

(syn. *B. ascendens* Willd., *B.*
repens L. var. *diffusa* L, *B.*
coccinea Mill. , *B. diffusa* var.
viscosa (Lag. & Rod)Heim.
Commicarpus coccinea Mill.
Lahg.).

Yabraq-Alwadheea, Abyan, Modia

Boerhavia elegans Choisy

Yabraq-Alwadheea, Abyan,

Boerhavia erecta L

Yabraq-Alwadheea, Modia
Boerhavia repens L
 (syn. *B. diandra* L., *B. repens* L.
 var. *glabra* Choisy)
 Modia, Lawder,
Bougainvillea spectabilis (Willd)
 Cultivated as ornamental
Commicarpus ambiguus Meikle,
 Modia, Lawder,
Commicarpus boissieri (Heim.)
 Cuf
 (syn. *Boerhavia boissieri* Heimerl).
 Modia
Commicarpus helenae
 (J.A.Scholtes)Meikle
 (syn. *Boerhavia helenae* Schultes,
Commicarpus stellatus
 (Wight)Berhaut).
 Abyan,
Commicarpus mistus Thulin
 Modia, Lawder,
Commicarpus pedunculatus
 (A.Rich.)Cuf
 (syn. *Boerhavia pedunculosa*
 A.Rich.).
 Abyan,
Commicarpus plumbagineus (Cav
 .) Standl
 (syn. *Boerhavia dichotoma* Vahl.
B. plumbaginea Cav. *B.*

plumbaginea Cav. var. *dichotoma*
 (Vahl)Aschers. & Schweinf., *B.*
plumbaginea Cav. var.*glabrata*
 Boiss., C. verticillatus
 (Poiret)Stand.).

Modia, Lawder,

Ochnaceae:

Ochna inermis (Forssk.)Schweinf
 (syn. *Euonymus inermis* Forssk., *O.*
parvifolia Vahl)

J.A lareys,

Oleaceae:

Jasminum grandiflora L.

(syn. *J. floribundum* R.Br. ex Fres).

Abyan, Yafaa,

Jasminum sambac (L.)Ait

Cultivated

Olea africana MILL. J.,

Upper Abyan. J. Alareys

Orobanchaceae:

Cistanche phelypaea (L.) Cout.

(syn. C. tubulosa
 (Schenk.)R.Wight).

Yabraq-
 Alwadheea, Yafaa, Modia, Lawder

Cistanche rosea E.G.Baker

Yabraq-Alwadheea,

Orobanche cernua Loefl

Modia, Lawder, Abyan,

Oxalidaceae:

Oxalis corniculata L

Yabraq-Alwadheea, Lawder

Pandanaceae:

Panadanus odoriferous (Forssk.)
Chiov

(syn. *P. odoratissimus* L., *P. tectorius* Sol.).

Abyan, Mudiyah, Lawder

Papaveraceae:

Argemone mexicana L

Yabraq-Alwadheea, Abyan, Modia

Pedaliaceae:

Sesamum indicum L

Cultivated

Plantaginaceae:

Campylanthus *pungens*
(O.Schwartz)

Yabraq-Alwadheea,

Plantago major L.

Yabraq-Alwadheea, Yafaa,

Plantago lonceolata L.

Yabraq-Alwadheea, Modia,
Lawder, Yafaa,

Plantago ovata Forsk.

Abyan,

Plumbaginaceae:

Limonium axillare (Forssk.) Ktze

(syn. *Statica axillari* Forssk.)

Abyan,

Limonium cylindrifolium (Forssk.)
Verde

(syn. *Statice cylindrifolia* Forssk.).

Abyan,

Limonium pruinosum (L.) KTZE

Abyan

Plumbago zeylanica L.

Lawder,

Poaceae:

Aeluropus lagopoides (L) Trin. Et.
Tw

(syn. *A. repens*, *A. brevifolius* Nees
ex Steud.,

A. massauensis (Fres.)Mattei).

Abyan, Modia, Yabraq-Alwadheea

Arstida adscensionis L.

(syn. *A. caeruleascens* Desf.)

Yabraq-Alwadheea, Abyan, Modia

Aristida ferrilateris S. M. Phillips

Yabraq-Alwadheea,

Brachiaria *leersioides*
(Hochst.)Stapf

Abyan, Modia, Lawder

Brachiaria reptans (L.)E Gardner
& C.E. Hubb

(syn. *Vrochloa reptans* (L.)Stapf.).

| | |
|--|---|
| Yabraq-Alwadheea, Cenchrus ciliaris L. (syn. <i>Pennisetum cenchroides</i> Pers., <i>P.ciliaris</i> (L.)Link.). | <i>Dichanthium annulatum</i> (Forssk.) Stapf. |
| Yabraq-Alwadheea, Abyan, Lawder, Yafaa | Modia, Lawder, <i>Dichanthium foveolatum</i> (Del.)Roberty |
| <i>Cenchrus pennisetiformis</i> Hochst.ex Steud. | (syn. <i>Eremopogon foveolatus</i> (Del.)Stapf). |
| Abyan, | Abayn, |
| <i>Cenchrus setigerus</i> | <i>Echinochloa colona</i> (L.) Link. |
| Yabraq-Alwadheea,Abyan | Yabraq-Alwadheea,Abyan,Lawder |
| <i>Chloris barbata</i> Sw. | <i>Echinochloa crus-galli</i> (L.)P.Beauv |
| Yabraq-Alwadheea, Abyan, Lawder, Yafaa | Abyan <i>Eragrostis barrelieri</i> Dav. |
| <i>Cymbopogon schoenanthus</i> (L.) Spreng. | Modia, Abyan |
| Yabraq-Alwadheea, Abyan, Modia | <i>Eragrostis ciliaris</i> (L.) R. Br. |
| <i>Cynodon dactylon</i> (L.) Pers. | Yabraq-Alwadheea,Abyan, <i>Eragrostis papposa</i> (Roem. et Schult.) Steud. |
| Yabaq- Alwadheea,Abyan,Yafaa,Modia,L awder, | Yabraq-Alwadheea,abyan, <i>Halopyrum mucronatum</i> (L.)Stapf |
| <i>Dactyloctenium aegyptiacum</i> (L.) Willd. | Lawder, <i>Hordeum vulgare</i> L |
| Yabraq-Alwadheea,Abyan,Lawder | Cultivated. |
| <i>Dactyloctenium scindicum</i> Boiss. (syn. <i>D. glaucophyllum</i> Courb.). | <i>Leptotherim senegalense</i> (Kunth)W.D.Clayton |
| Yabraq-Alwadheea,Abyan | (syn. <i>Latipes senegalensis</i> (Gay)Kunth.). |
| <i>Desmostachya bipinnata</i> (L.) Stapf. Abyan, | Abyan |

Panicum turgidum Forssk.
 Yabraq-Alwadheea, abyan,
Paspalum dilatatum Poir.
 Modia
Pennisetum glaucam (L.)R.Br
 (syn. *P. typhoides* (Burm.f.)Stapf.
 & Hobb.).
 Modia, coastal areas
Phealaris minor Retz.
 Yabraq-Alwadheea,
Odyssea mucronata (Forssk.)
 Stapf.
 Abyan, Yabraq-Alwadheea, Modia,
 Lawder
Setaria barbata (Lam.) Kunth.
 Yabraq-Alwadheea, Abyan,
Sorghum bicolor (L.)Moench
 Cultivated.
Sporobolus comsimilis Fresen
 Modia
Sporobolus spicatus(Vahl)Kunth
 Yabraq-Alwadheea, Abyan,
 Lawder, Yafaa,
Stipagrostis hirtigluma (Steud. ex
 Trin. & Rupr.)De Winter
 Yabraq-Alwadheea,
Stipagrostis paradisea (Edgew.)de
 Winter
 Modia, Abyan

Tetrapogon villosus Desf.
 Yabraq-Alwadheea, Abyan,
Tragus berteronianus Schult
 Yabraq-Alwadheea, Modia
Tragus racemosus (L.)All.
 . Yabraq-Alwadheea, Modia
Tragus berteronianus Schult
 Abyan,
Zea mays L .
 Cultivated
Polygalaceae:
Polygala abyssinica R.Br. ex
 Fresen
 Yafaa
Polygala erioptera DC
 (*P. thurmanniana* Chodat).
 Abyan, Modia, Lawder,
Polygala irregularis Boiss
 Abyan
Polygonaceae:
Calligonum comosum Herit.
 (syn. *Polygonoides* subsp.
Comosum (L Her)Sosk.)
 Yabraq-Alwadheea,
Polygonum amphibium L.
 Abyan,
Polygonum aviculara L.

Abyyan

Rumex nervosus Vahl

Modia, Lawder, Yafaa

Rumex vesicarius L.

Yabraq-

Alwadheea, Abyan, Lawder, yafaa

Portulacaceae:

Portulaca grandiflora

Lawder

Portulaca oleracea L. subsp.

Oleracea

Abyan, Lawder, Modia

Portulaca quadrifida L.

(syn. *P. hareschata* Forssk., *P. imbricata* Forssk., *P. linifolia* Forssk.)

Abyan, Yafaa, Modia

Primulaceae:

Anagallis amensis L

Yafaa,

Primula verticillata Forsk.

Abyan,

Punicaceae:

Punica granatum L.

Cultivated.

Resedaceae;

Ochradenus baccatus Del.

(syn. *O. baccatus* Del. var. *monstrosa* Muell., *O. baccatus* Del.

var. *scandens* Hochst. & Steud. Ex Muell)

Abyan, Modia, Lawder, Yafaa

Reseda sphenocleoides Defl

Yabraq-Alwadheea, Abyan, Modia, Lawder, yafaa

Rhamnaceae:

Berberis discolor (Klotzsch) Hemsl. L

(syn. *phyllogeiton discolor* (Klotzsch)Herzog).

Lawder

Phyllogeiton discolor(Klotzsch) Herzog.

Modia

Zizaphus spina-Christi (L.) Desf.

Yafaa, Lawder,

Modia, Abyan, Yabraq-Alwadheea

Rubiaceae:

Breonadia salicina (Vahl) Hepper & J. R. I. Wood

(syn. *B. microcephala* (Del.)Ridsd. *Adina microcephala* (Del.)Hiern.).

Yabraq-Alwadheea

Coffea arabica L.

Cultivated in Yafaa

Pavetta longiflora Vahl subsp. *Longiflora*

(syn. *P. arabica* Brenek, *P. deflersii* Bremek.).

Yabraq-Alwadheea

Pentas

lanceolata (Forssk) Benth & Hook.

Yabraq-Alwadheea

Tarenna graveolens (S. Moore)

Bremek. *subsp. arabica* (Cuf.)

Bridson

Yabraq-Alwadheea

Rutaceae:

Citrus aurantiifolia (Christm.)

Swingle

Cultivated

Citrus deliciosa Ten

Cultivated

Citrus limon (L.) Burm.f.

Cultivated

Citrus sinensis (L.) Osbeck .

Cultivated

Ruta chalepensis L

Lawder,

Salvadoraceae:

Dobera glabra (Forssk.) Poir

Yabraq-Alwadheea

Salvadora persica L.

J. Alareys, Abyan, Modia, Lawder,

Yafaa, Yabraq-Alwadheea

Sapindaceae:

Dodonaea viscosa (L.) Jacq

(syn. *D. angustifolia* L.f.)

Mudiyah, Lawder, Abyan, J.

Alareys,

Sapindus saponaria L.

Abyan,

Scrophulariaceae:

Anticharis glandulosa Asch

Modia, Lawder, Abyan

Anticharis linearis (Benth.) Hochst.
ex Asch.

Abyan

Aptosimum pumilum

(Hochst.) Benth.

Yabraq-Alwadheea, Lawder, Yafaa

Bacopa monniera

Hayata & Matsum

Abyan, Modia, Lawder

Kickxia pseudoscoparia

D.A. Sutton

Abyan,

Kickxia qaraticus D.A. Sutton.

Abyan

Schweinfurthia pedicellata

(T. Anders.) Benth. et Hook

(syn. *Anarrhinum pedicellatum*

T. Ander., *A. apterum* Vatke, *A.*

pedicellare Bentham,

Schweinfurthia pedicellaris

(T. Ander.) Wetts.).

| | | |
|--|------------------------------------|--|
| Abyan, | <i>Nicotiana tabacum</i> L. | |
| <i>Scrophularia arguta</i> Sol. | Cultivated | |
| Yabraq-Alwadheea | <i>Physalis minima</i> L. | |
| <i>Striga asiatica</i> (L)Kuntze. | Yabraq-Alwadheea | |
| Yabraq-Alwadheea, Yafaa, | <i>Physalis angulata</i> L. | |
| <i>Striga angustifolia</i> (D. Don.) C. J. Saldanha | Yabraq-Alwadheea | |
| Yabraq-Alwadheea | <i>Solanum cordatum</i> Forssk | |
| <i>Striga hermonthica</i> (Del.)Benth. | Yabraq-Alwadheea, Abyan, | |
| Yabraq-Alwadheea, Modia, Lawder | <i>Solanum coagulans</i> Forssk | |
| <i>Veronica polita</i> Fries | Yabraq-Alwadheea, Abyan | |
| Modia | <i>Solanum forsskali</i> Dunal | |
| Solanaceae: | Modia, Lawder, | |
| <i>Capsicum annum</i> L. | <i>Solanum glabraatum</i> Dunal | |
| Cultivated | Yabraq-Alwadheea. | |
| <i>Capsicum frutescens</i> L | <i>Solanum incanum</i> L | |
| Cultivated | Yabraq-Alwadheea, Abyan, | |
| <i>Datura innoxia</i> Mill. | Lawder, Modia, Yafaa | |
| Yabraq-Alwadheea, Abyan, Modia | <i>Solanum melongena</i> L. | |
| <i>Datura stramonium</i> L. | Cultivated | |
| Yabraq-Alwadheea, Yafaa, Modia | <i>Solanum nigrum</i> L. | |
| <i>Lycium shawii</i> Roem. et Schult. | Yabraq-Alwadheea, Abyan, | |
| (syn. <i>L. arabicum</i> Schweinf., <i>L. persicum</i> Miers). | Modia, Lawder, Yafaa | |
| Yabraq-Alwadheea, Yafaa, Abyan, Modia | <i>Solanum sepicula</i> | |
| <i>Lycopersicon esculentum</i> Mill | Modia, Yafaa, | |
| Cultivated | <i>Solanum tuberosum</i> L | |
| | Cultivated. | |
| | <i>Solanum unguiculamm</i> A. RICH | |

Yafaa, Abyan

Solanu villosum . Mill

Modia, Yabraq-Alwadheea,
Lawder, Abyan, Yafaa

Withania somnifera (L.) Dunal.

Modia, Abyan, Lawder, Yabraq-
Alwadheea, Yafaa

Sterculiaceae:

Hermannia paniculata Franch

, J. Alareys,

Melhanian ovata (Cav.) Spreng

Lawder

Melhanian stipulosa J.R.I. Wood

Yafaa

Sterculia africana (Lour.) Fiori

(syn. *S. triphaca* R.Br.)

Yabraq-
Alwadheea, Abyan, Lawder, Yafaa

Tamaricaceae:

Tamarix aphylla (L.) Karst

(syn. *T. articulata* Vahl, *T.*
orientalis Forssk.).

Frequent in many localities of
Abyan Gov.

Tamarix arabica Bunge

Frequent in many localities. of
Abyan Gov

Tamarix nilotica (Ehrenb.) Bunge

Frequent in many localities. of
Abyan Gov

Tiliaceae:

Corchorus depressus (L.) Stocks

Yabraq-Alwadheea, Abyan,
yafaa, Modia, lawder

Corchorus olitorius L.

Cultivated

Corchorus tridens L.

Abyan, Modia

Corchorus trilocularis L.

Abyan, yabraq-Alwadheea, Modia,
lawder, Yafaa

Grewia erythraeae Schweinf.

Abyan, Modia, Lawder

Grewia velutina (Forssk.) Vahl

Yabraq-Alwadheea, Modia, Lawder

Grewia tenax (Forssk.) Fiori

Yabraq-Alwadheea, Abyan, Yafaa,

Typhaceae:

Typha domingensis pers

(syn. *T. angustata* Bory & Chaub.)

Abyan,

Urticaceae:

Forskohlea griersonii A. Miller

J. Al Arays, Abyan,

Forskohlea tenacissima L

(syn. *Caidbeja adhaerens* Forssk.)

Yabraq-Alwadheea, Modia, Lawder

Verbenaceae:

Lantana camara L.

Introducerd, Gardens, Road sides & neglected areas

Lantana viburnoides (Forssk.) Vahl

Modia

Phyla nodiflora (L.) Greene.

(syn. *Lippia nodiflora* (L.) A. Rich.).

Lawder, Modia, Abyan,

Vitaceae:

Cissus quadrangularis L.

(syn. *Vitis quadrangularis* Wall.)

Yabraq-Alwadheea, Abyan, Yafaa, Modia, Lawder

Cissus rotandifolia (Forssk.) Vahl.

Yabraq-Alwadheea, Abyan, Yafaa, Modia, Lawder

Cyphostemma ternatum (Forssk.) Descoing

(syn. *Cissus ternatua* (Forssk.) Gmel.)

Abyan,

Zygophyllaceae:

Fagonia arabica L.

Abyan,

Fagonia cretica L.

Abyan,

Fagonia hadramautica Beier & Thulin

Yabraq-Alwadheea,

Fagonia indica Burm. f.

(syn. *F. parviflora* Boiss.).

Yabraq-Alwadheea, Abyan, Modia, Lawder

Fagonia schweinfurthii Hadidi

Abyan,

Peganum harmala L.

Lawder, Modia, Abyan

Seetzenia lanata (Willd.) Bull.

Yabraq-Alwadheea,

Tribufus arabicus H. HOSNI

Abyan,

Tribulus bimucronatus Viv

(syn. *T. spurius* Kralik.).

Lawder,

Tribulus pentandrus Forssk

Abyan,

Tribulus terrestris L.

Yabraq-Alwadheea, Abyan, Modia, Lawder,

Tetraena alba (L. F.) Beier & Thulin

Yabraq-Alwadheea,

Tetraena simplex (L.) Beier &
Thulin(syn. *Zygophyllum simplex*
L.

Yabraq-Alwadheea,
Modia, Lawder,

References

1. Abdul-Ghani A, Saeed WA, Hussein MA. 2002. Natural wild flora and vegetative composition of Bana Delta(Abyan, Yemen). Univ Aden J Nat Appl Sci.; 6(1): 119-128
2. Al-Gifri A.N ,Abdul Gani, A-H. & Salem, M. F.(2021): Weeds of Delta Abyan (Yemen). A preliminary study: Symposium of Faculty of Agriculture, University of Aden-pp 25-27
3. Al-Gifri ,A.N., and M.A. Hussein, 1993. PlantCommunities along the road from Aden to Shiekh Salem(Abyan), Yemen. Feddes Repertprium ;Berlin 104, 3-4,267-270
- 4 .Al- Hawshabi,O .S .S. 2015.Euphorbia dracunculoides Lam.(Euphorbiaceae)Anew record to the flora of Yemen. Ass.Univ.Bull.Environ.Res.Vol.18 No.1pp.11-18.
5. Al-Khulaidi AA. 2013. Flora of Yemen. Sustainable Natural Resource Management Project (SNRMP) II, Sana'a, Yemen,
6. Al-Meisri1M.A., Madlin A. Obell ,and Mohammed A. Hussein2. 2012. Natural plants of medicinal use in Delta Abyan, Yemen. Univ Aden J Nat Appl Sci.; 16(1):67-74.
- 7.Al-Negashi,R.A.2019. Crop composition in Abyan Govrnorate Agricultural Geographical studymPhD. Geo-agriculture, PhD.thesis, faculty of Art,Aden university
8. Awadh A. A. 2006. Vegetative Composition of Plains and Lower Plateaus of Coastal Area of Abyan Gov.MSC.Desertation submitted to the biology Department Faculty of education -Aden , Aden University pp.142
9. .Ba – Asher S.M .and. Hussein. M. A .2009Phytogeomorphological study of Abyan Delta and neighboring areas (Yemen). Univ. Aden J. Nat. and Appl. Sc., Vol. 13 No. 1 – April.pp.81- 96
- 10-Boulos, L. 1988. A contribution to flora of South Yemen.Candollea 43:549-585.
11. Gabali SA, Al-GifriAN. 1990. Flora of South Yemen -Angiospermae. A provisional checklist. FeddesRepert Berlin.; 101(7-8): 373-383
- 12-Obel·Madleen Abdullah . 2024. Flora of Wadi Yabraq and Al-Mahory villages in Al-wadie District, Abyan Governorate - Yemen (Acase study).

PhD. thesis, dept. of biology, faculty of education Aden- Aden university.203pp.

13-Obel ‘Madleen Abdullah ,, Abdul Wali Al-Khulaidi, Mohammed Abdullah Hussein Cleome glaucescens DC (Cleomaceae)International Journal of Botany StudiesVolume 7, Issue 8, 2022, Page No. 1-4.

14. Mahmood Ahmed Al-Meisari¹, Mohammed Abdullah Hussein² and Abdul Nasser Al – Gifri². 2023.Floristic diversity of the rocky habitats and plains of the coastal area of Abyan Governorate, Yemen. Univ. Aden J. Nat. and Appl. Sc. Vol. 27 No.2 –pp.251- 263

15.Maryam Allahdou. 2012. The study of Flora, biological form and the chorology of plant covering in Sistan region– IRAN. International Research Journal of Applied and Basic SciencesVol, 3 (S): 2567-2571

16. Mohammed A. Hussein, Othman S. S. Al-Hawshabi, Abdul-Hakim Abdul-Ghani and Amani F. Qardash 2015. A survey of weeds found in citrus and pepper fields of Al-Sharaa village, Wadi Murran, Mudia District, Abyan Governorate, YemenUniv. Aden J. Nat. and Appl. Sc. Vol. 19 No.1.pp.35-43

17.Saeed W A. and AL-Subai , M. Y. 2001. The Effect of Ecological Factors on The Growth and Dynamics of the Coastal Vegetation Cover of the Abyan Governorate. Univ Aden J Nat Appl Sci.;Vol. 5 (1 71-84

18.Thulin ‘Mats and Al-Hawshabi, O.S.S.2022. The identity of Caralluma dolichocarpa (Apocynaceae)-Asclepiadoideae) and acombination in Ceropogia for Echidnopsis globose .Nordic Journal of Botany, e03692.

19. Hussein‘ Mohammed Abdullah ,Yasser Al-Khader Nasser .2009. Structure of flora in Al-Kowr:The area situated between Thurra velly and Shohat velly of Lowder district,Abyan governorat,(Acase study).Msc. thesis, dept. of biology, faculty of education Aden- Aden university.pp.112

20.Masdoos‘Zamila Mohammed 2012.The Ethnobotany of Modia District, Abyan Governorate, Republic of Yemen".MSc. Thesis Department of Biology (Botany Section),Faculty of Science, Sana'a University. p.290

21Masdoos‘.Zamila Mohammed ‘ Mohammed Abdullah Hussein and Abdul NasserAl–Gifri. 2023. Floristic diversity of Lawder District, Abyan Governorate, Yemen . Univ. Aden J. Nat. and Appl. Sc. Vol. 27 No.1.pp.153-168

22Masdoos‘.Zamila Mohammed , Mohammed Abdullah Hussein and Abdul Nasser Al – Gifri(2023,).Floristic composition, biological spectrum and

phytogeographic distribution of the flora of Madiyah District, Abyan Governorate, Yemen . Univ. Aden J. Nat. and Appl. Sc. Vol. 27 No.2 .pp265-278 .



STARDOM UNIVERSITY

**Stardom Scientific Journal of
Natural and Engineering Sciences**



— **STARDOM SCIENTIFIC JOURNAL OF NATURAL AND ENGINEERING SCIENCES** —
PUBLISHED TWICE A YEAR BY STARDOM UNIVERSITY
Volume 2 - 1st issue 2024
International deposit number : ISSN 2980-3756