

WILD MEDICINAL PLANTS IN EGYPT

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An Inventory to Support Conservation and Sustainable Use

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in Collaboration with

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PREFEACE

The present work is the outcome of numerous efforts of many institutions and persons. Since 1956, I have been engaged with researches concerned with the wild medicinal plants in Egypt. The early co-operation with Late Prof. Zakaria Fouad Ahmed, Professor of Phytochemistry and his co-workers in the National Research Centre, and the colleagues from the Pharmacognosy Department, Faculty of Pharmacy, University of Cairo was among the reasons of the ever-increasing interest of these plants. I have been a member of numerous Egyptian Committees for medicinal plants and their development. The outcome of the meetings of these committees is tremendous. Moreover, the traditional knowledge of the use of these plants in folk medicine and the Arabic (Islamic) scientific heritage in this field represent a very rich source of knowledge. All these and the excursions to the

various parts of the desert in the Middle East and North Africa inspired me to write about the wild medicinal plants in Egypt and the other Arab countries.

As a president of the National Committee for the Conservation of Nature and Natural Resources in Egypt (IUCN National Committee), I initiated, in co-operation with colleagues from the other North African Countries, holding a workshop and the co-ordination of the IUCN (International Union for Conservation) and the support of the Swiss Development Co-operation (SDC) and the Academy of Scientific Research and Technology, of a workshop on: Arid Lands Biodiversity in North Africa held in Cairo, November 14-16, 1994. The issue of the necessity of conservation of the wild medicinal plants was raised in that workshop. Through the help of the IUCN, a programme for biodiversity conservation was launched in the countries of North Africa. The medicinal plants, as an endangered component of biodiversity, received a special attention. A team of researchers in Egypt were co-operating in the investigation of the wild medicinal plants in Egypt. This team included three professors from the Department of Pharmacognosy who were co-operating in the IUCN project of the conservation of biodiversity. Reports as output of the project were presented to the IUCN, the National IUCN Committee, and discussed in meetings with other colleagues from the N. African countries.

The data and information incorporated in the reports of the project on wild medicinal plants in Egypt represent a voluminous addition to the knowledge in the field of medicinal plants, especially the wild ones which received a little attention as compared to the cultivated ones. Therefore, it has been thought that it can be very important to publish these data in the present book. More information and data were collated and added. Also, photographs and illustrations were included.

This book aims at giving a reasonable background to researchers in the fields of pharmacognosy, phytochemistry, ecology, botany, and other related subjects. In view of the threatening of these plants due to overexploitation, increasing demands on them, change of habitat conditions, there is a necessity to conserve these plants for sustainable use. Their conservation will help also the conservation of the traditional knowledge of the native healers. Moreover, the intellectual property rights are conserved for the country.

It is hoped that this volume will not only allow researchers, decision makers and stakeholders to know about this important component of biodiversity and its problems in Egypt, but will also set forth action for its conservation and for its rational and sustainable utilization, in accordance with the principles outlined in the International Conventions.

Without the help and support of many institutions, persons, this book would not appear. Some of these passed leaving their impact on the field of wild medicinal plants. Others are still generously giving and supporting these studies. Doubtless I am indebted to all those have given a hand or any support. The continuous support of the President of the Academy of Scientific Research and Technology made the appearance of this book a reality. To, him I feel grateful for his support. Thanks are due to the IUCN, especially Mr. Francis Parakatil, the Regional Co-ordinator for West, and Central Asia and N.Africa, whose efforts were instrumental in providing effective networking throughout the region and supporting the implementation of the work. has been continuously supporting the project as well as the other projects of biodiversity conservation in Egypt and the other North African countries. His help is greatly appreciated. It is evident that the financial support of the Swiss Development Co-operation has helped in the preparation of the reports for the project and the printing of the book.

Cairo, January 30, 1999

K.H. BATANOUNY

Fig. 8- *Urginea maritima*: A- Habit, B- Portion of inflorescence, C- Dissected flower showing stamens, ovary and style, D- Fruit , E- Seed.
After: El-Gadi, A. Flora of Libya, no 57, *Liliaceae*, 1978.

Fig. 4- *Citrullus colocynthis*: A- Flowering and fruiting branch, B- Portion of leaf showing hairs, C- Male flower, D- T.S. in fruit, E- Seed.

After: Jafri, S.M.H. Flora of Libya, no. 32, *Cucurbitaceae*, 1977.

Fig. 5- *Datura stramonium*: A- Habit, B- Flower, C- Mature fruit showing dehiscence, D- Seed.

After : Siddiqi, M.A. Flora of Libya, no. 62, *Solanaceae*, 1978.

Fig. 3- A- *Ammi visnaga* and B- *Ammi majus*

After: Taekholm, V. Students Flora of Egypt, 1974.

Fig. 7- *Silybum marianum*

After ; Taekholm, V., Students Flora of Egypt, 1974.

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After: Chakravarty, H.L., Plant Wealth of Iraq.

Since uncontrolled wild-harvesting of wild medicinal plants will often lead to resource depletion, the development of this activity to contribute to farm household incomes should only be undertaken under controlled and monitored conditions. This will require the cooperation and usually the intervention of government and conservation authorities, since the local household gatherer will not have the necessary information. Farm households should be involved as far as possible in devising and implementing a sustainable strategy for the use of wild-collected medicinal plant material. Such a strateg