Ee-JRIF
Ethiopian e-Journal
for Research and Innovation Foresight

Vol 4, No 1 (2012) -pp (129)

A Review of "Natural Database for Africa (NDA), CD-ROM, Version 2.0"

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Title of CD-ROM: Natural Database for Africa (NDA); Edition: Version 2.0; Editor: Ermias Dagne; Date of Release: August 2011; Purchasing and other details: Available at Aritiherbal.com

There are an estimated 270,000 higher plant species on this planet. About 10,000 (3.7%) of them are used as medicinal plants (Kinghorn et al., 2011), with some estimates putting the number as high as 53,000 (19.6%) (Hamilton, 2003). In Africa, about 60,000 plant species (22.2% of the world flora) are known to exist (Rasoaniavo, 2010), and of these, 5,000 (one out of every 12 plants) have medicinal applications (Iwu, 1993). The largest on-line natural products database, Natural Products Alert (NAPRALERT^{sm}), based at the University of Illinois at Chicago (UIC), College of Pharmacy, is perhaps the most comprehensive resource of the world flora, covering various aspects of plants, including chemistry, biological activities and medicinal uses. It draws on over 200,000 scientific articles and reviews.

There are a number of on-line African regional databases of plants of various depths. These resources deal with plants, for example, from West and Southern Africa. A comprehensive electronic database of African plants (medicinal plants included) is lacking, although some attempts have been made in the past. The CD-ROM edited by Professor Ermias Dagne is a step in the right direction. This important database is an updated version (Version 2.0) of an earlier edition (Version 1.0), which was released in December, 2009. The current edition covers about 7,000 plant species, up from the previous 2,700 that were included in the 2009 version. The 7,000 species are mainly from Ethiopia, but also include many plants from some adjoining countries. Across the top panel of the front page of CD-ROM database are listed the letters A to Z. Clicking on each letter opens up all plants whose botanical (scientific) names start with the particular letter. The individual species can then be searched for detailed information. The database can also be searched by using various key words. For example, entering "Ethiopia" into the search box produces a list of 7,130 species, "Burundi" 290 species, "Congo" 580 species, "Djibouti" 157 species, "Kenya" 1,583 species, "Somalia" 1,253 species, "Sudan" 1,178 species, "Tanzania" 1,100 species and "Uganda " 850 species, and so on. The presentation of each plant species follows a standard format for the most part. The entry under each plant has species and family names, local (vernacular names, where applicable) and English names. A section under each plant gives botanical description, habitat, geographic distribution and uses, including medicinal

applications. The last part of each monograph lists references from which pertinent information is culled. At the end of several of the monographs, additional references are directly appended, which the user can easily access for further reading.

The database is useful to lay readers who would like to learn about the botanical resources of the continent, and to researchers who are actively engaged in natural products, ethnobotanical and medicinal plant research. Information on individual African plants is scattered in the literature, and the availability of consolidated information in a single electronic compilation saves a lot of valuable time for the busy researcher in locating information rather quickly. The NDA Version 2.0 comes in handy and serves this very purpose.

The Natural Database for Africa appears to be a work in progress. As indicated on the page “How to use this CD-ROM,” there is a daunting task ahead in expanding the current version to include the nearly 60,000 plant species of the continent. In future editions, the author may consider changing the title to Natural Products Database for Africa (NAPDA) to reflect the contents of the CD-ROM more precisely. Overall, the author should be applauded for producing and making available such elegantly compiled natural products CD-ROM. This reviewer urges individuals, researchers and institutions to take advantage of this useful resource. More information on the CD-ROM can be obtained at Aritiherbal.com.

References

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