

Describing useful plants

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The number of higher plants in the world is estimated at 300,000 species. In the course of time, mankind has put to use about 40,000, either directly or indirectly. The majority of these plant species - 25,000 - grow in the tropics. While some have become major world crops, others are used only during famine. Some have received international attention, while others are only of local importance. There are overexploited plants and underutilized ones.

At present, information about useful plants in the tropics is scattered over many publications. Even though improved library databases and internet have made it easier to find information, this remains a problem especially in developing countries. The objective of PROSEA and PROTA is to make access easier by creating a system of 'information brokerage and knowledge repatriation' for countries in the South.

Plant Resources of South-East Asia (PROSEA)

What started in 1987 as a bilateral initiative between Indonesia and the Netherlands, gradually became a well-known regional partnership of seven institutions in seven countries, operating as a foundation under the acronym PROSEA. Over the past 16 years (1987 - 2003) an elaborate synthesis of existing information has been made of approximately 7000 useful plants from the region. The final product is a series of 24 books, each focusing on a commodity group and containing review articles describing the useful plants in a standardized way. Each species, although often multi-purpose, is described only once according to its main use although information on other uses is also provided in the same article. All this information is now being made available through a web database that is scheduled for completion by the end of 2005.

Table 1: The PROSEA Book Collection

| Book | Year | Title |
|---------------|------|--|
| Prosea 1 | 1989 | Pulses |
| Prosea 2 | 1991 | Edible fruits and nuts |
| Prosea 3 | 1991 | Dye and tannin-producing plants |
| Prosea 4 | 1992 | Forages |
| Prosea 5 (1) | 1993 | Timber trees: Major commercial timbers |
| Prosea 5 (2) | 1995 | Timber trees: Minor commercial timbers |
| Prosea 5 (3) | 1998 | Timber trees: Lesser-known timbers |
| Prosea 6 | 1993 | Rattans |
| Prosea 7 | 1995 | Bamboos |
| Prosea 8 | 1993 | Vegetables |
| Prosea 9 | 1996 | Plants yielding non-seed carbohydrates |
| Prosea 10 | 1996 | Cereals |
| Prosea 11 | 1997 | Auxiliary plants |
| Prosea 12 (1) | 1999 | Medicinal plants 1 |
| Prosea 12 (2) | 2001 | Medicinal plants 2 |
| Prosea 12 (3) | 2003 | Medicinal plants 3 |
| Prosea 13 | 1999 | Spices |
| Prosea 14 | 2001 | Vegetable oils and fats |
| Prosea 15 (1) | 2001 | Cryptogams: Algae |
| Prosea 15 (2) | 2003 | Cryptogams: Ferns and fern allies |
| Prosea 16 | 2000 | Stimulants |
| Prosea 17 | 2003 | Fibre plants |
| Prosea 18 | 2000 | Plants producing exudates |
| Prosea 19 | 1999 | Essential-oil plants |

Branch with
fruits of *Spondias
purpurea*.
Example of
an illustration
in the PROSEA
books.



For more information on the book series, please visit www.prosea.nl. A low-price paperback edition is available for developing countries; it can be ordered from the PROSEA Network Office, P.O. Box 332, Bogor 16122, Indonesia. E-mail: info@proseanet.org. Additional information about the Web Database can be obtained from: www.proseanet.org.

Plant Resources of Tropical Africa (PROTA)

In 2000, the success of PROSEA led to a similar programme being set up for tropical Africa. The number of useful plants in tropical Africa is estimated to be around 7000, about the same as for Southeast Asia. The PROTA partnership includes eleven institutions in seven African, one Southeast Asian and three European countries. This time the 'knowledge system' will be directly built into a web database with free access, but the information will also be made available in a book and CD-Rom in English and French.

It is estimated that the implementation of the programme will take ten years (2003 - 2012). Currently, the first three Commodity groups are in preparation. About 100 manuscripts on vegetables are already accessible through the Web Database.

More information about this programme and access to the web database can be obtained from: www.prota.org.

The model publications, "*PROTA basic list of species and commodity grouping/PROTA liste de base des espèces et de leurs groupes d'usage*" (2002), and "*PROTA Precursor/PROTA Précurseur*" (2002), made during the preparatory phase are available from CTA, P.O. Box 380, 6700 AJ Wageningen, the Netherlands. E-mail: cta@cta.nl.

Conclusion

The PROSEA/PROTA 'knowledge synthesis' is a uniquely comprehensive review of the useful plants of the tropics and a rich source of information that can be used for research, education, extension, policy measures and industrial development. It brings the 'world literature', currently only available to a happy few, into the public domain with due respect to traditional knowledge and intellectual property rights. Above all, it is a contribution to raising awareness on the 'world heritage of useful plants of the tropics'.

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