



THAILAND RED DATA : PLANTS

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Office of Natural Resources and
Environmental Policy and Planning

2006

First published :

December 2006
by Office of Natural Resources and
Environmental Policy and Planning (ONEP),
Thailand.

ISBN :

978-974-286-183-4

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Citation :

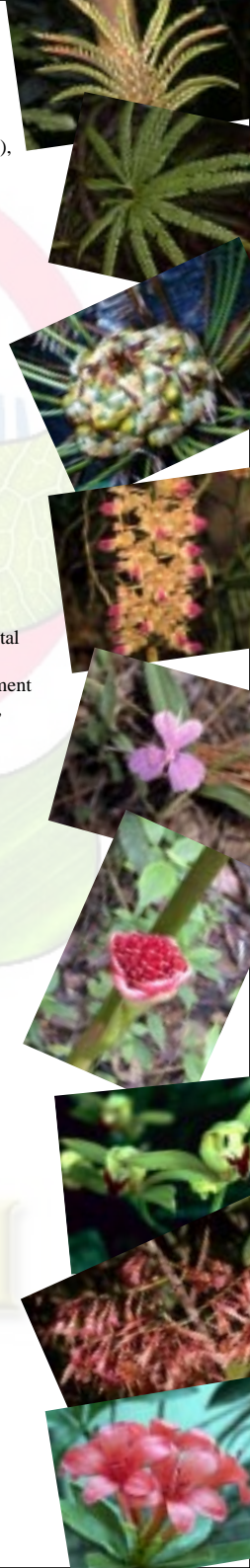
Santisuk T., Chayamarit K., Pooma R.,
Suddee S. 2006.
Thailand Red Data : Plants.
Office of Natural Resources
and Environmental Policy and Planning,
Bangkok, Thailand. 256 p.

Available from :

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Designed & Printed :

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Thai
CHM



N (North)

- 1 Mae Hong Son
- 2 Chiang Mai
- 3 Chaing Rai
- 4 Phayao
- 5 Nan
- 6 Lamphun
- 7 Lampang
- 8 Phrae
- 9 Uttaradit
- 10 Tak
- 11 Sukhothai
- 12 Phitsanulok
- 13 Kamphaeng Phet
- 14 Phichit
- 15 Nakhon Sawan

NE (Northeastern)

- 16 Phetchabun
- 17 Loei
- 18 Nong Bua Lum Phu
- 19 Udon Thani

- 20 Nong Khai
- 21 Sakon Nakhon
- 22 Nakhon Phanom
- 23 Mukdahan
- 24 Kalasin
- 25 Maha Sarakham
- 26 Khon Kaen

E (Eastern)

- 27 Chaiyaphum
- 28 Nakhon Ratchasima
- 29 Buri Ram
- 30 Surin
- 31 Roi Et
- 32 Yasothon
- 33 Amnat Charoen
- 34 Si Sa Ket
- 35 Ubon Ratchathani

SW (Southwestern)

- 36 Uthai Thani
- 37 Kanchanaburi
- 38 Ratchaburi

- 39 Phetchaburi
- 40 Prachuap Khiri Khan

C (Central)

- 41 Chai Nat
- 42 Sing Buri
- 43 Lop Buri
- 44 Suphan Buri
- 45 Ang Thong
- 46 Phra Nakhon Si Ayutthaya
- 47 Saraburi
- 48 Nakhon Pathom
- 49 Pathum Thani
- 50 Nakhon Nayok
- 51 Nonthaburi
- 52 Bangkok
- 53 Samut Prakan
- 54 Samut Songkhram
- 55 Samut Sakhon

SE (Southeastern)

- 56 Sa Kaeo

- 57 Prachin Buri
- 58 Chachoengsao
- 59 Chon Buri
- 60 Rayong
- 61 Chanthaburi
- 62 Trat

PEN (Peninsular)

- 63 Chumphon
- 64 Ranong
- 65 Surat Thani
- 66 Phangnga
- 67 Phuket
- 68 Krabi
- 69 Nakhon Si Thammarat
- 70 Phatthalung
- 71 Trang
- 72 Satun
- 73 Songkhla
- 74 Pattani
- 75 Yala
- 76 Narathiwat

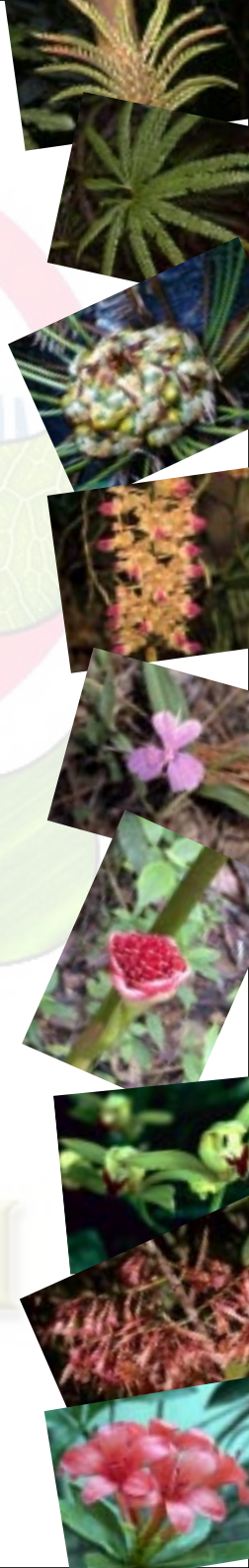


FOREWORD

Thailand harbours one of the richest floras on earth, with an estimated 10,000 species of vascular plants. 756 species are endemic and many of them are known only from one or a few localities. Due to the current rapid rate of forest destruction, these endemic and rare plants are extremely vulnerable to extinction. The compilation of Thailand Red Data : Plants were based on historical and recent collections of the herbarium specimens deposited at the main herbaria in Thailand and abroad. The additional botanical surveys have been launched in the areas where early records of endemic and rare plants are doubtful. More than 1,400 species are recorded, and many more new records can be expected. Since the work on the Flora of Thailand has so far enumerated only about 50 percent of the total country's flora, this list emphasizes an in-depth view of the richness of Thai flora with considerable number of the endemic and rare species. This Red Data List will serve as a guidance in conservation of endemic and rare plants. A detailed explanation on the biological and ecological aspects of these individual plant species are further needed for the completion of this book.

The Office of the Natural Resources and Environmental Policy and Planning (ONEP) has realized that the inventories of endemic and rare plants in danger of extinction will provide the basic plant database for the effective plant conservation in Thailand. Hence this Thailand Red Data : Plants book clearly illustrates information on the plant status and conservation priorities required in the future. On behalf of ONEP, I hope that this book will be great beneficial to government and non-government agencies, botanists, ecologists as well as interest individuals who are active in the programs on sustainable management and conservation of the native plants of Thailand.

Office of Natural Resources and
Environmental Policy and Planning
2006



ACKNOWLEDGEMENT

The checklist has been based on several publications of plants in Thailand, especially the Flora of Thailand, which have been investigated by both foreign and Thai botanists, especially Leena Phupathanaphong, Asst. Obchant Thaithong, David Middleton, Christian Puff, Willem de Wilde and Brigitta Duyfjes.

We thank to the BKF staff of the Forest Herbarium: Nannapat Pattharahirantricin, Sukontip Sirimongkol, Manop Poopath and Sommanussa Sangrit for their helps in many ways.

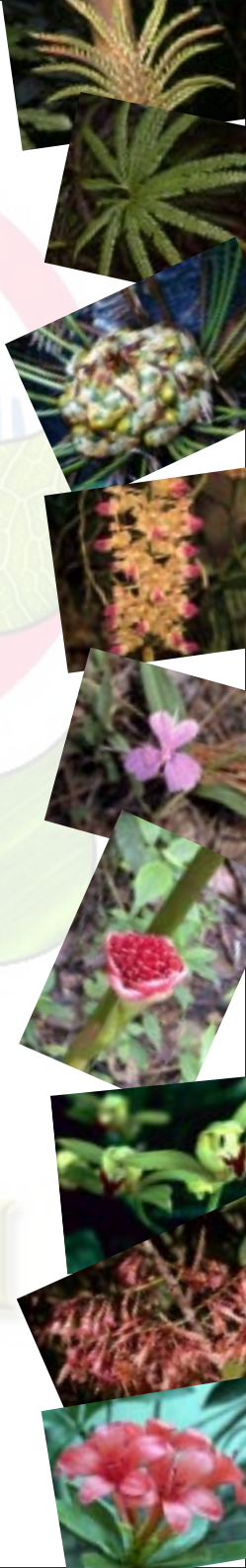
Finally, we would like to express thanks to the Office of Natural Resources and Environmental Policy and Planning (ONEP) for their supporting the work and publishing this list.

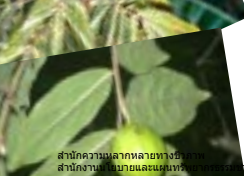
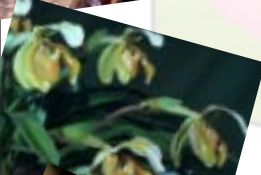


INTRODUCTION

The flora of Thailand is one of the richest among the tropical floras reckoning about 1,900 genera and 10,000 species of vascular plants of which about 10 percent is endemic to the kingdom. Wealth of Thai floras is due to the fact that the country is positioned at a unique crossroads of three main floristic regions namely, Indo-Himalaya, Indo-China and Malesia. Diverse environments such as climate ranging from the ever wet in the lower peninsular Thailand to the seasonal in the north, and varying altitude zones, 0-2,565 m undoubtedly render the existence and development of various vegetation types. As a result, Thailand shares its floras with many neighboring countries, the number of true endemics is therefore not high. However, the endemic and rare plants in Thailand are mainly determined by climatic and topographic factors including limestone hills and mountainous areas in high elevation.

Despite the richness of flora and forest habitats, Thailand faces the current rapid rate of forest destruction which caused genetic diversity and species to be at risk of extinction. The country has never had a Red Data List, neither the informative description on threatened species or ecological habitats. This work enumerated about 1,400 species from the total Thailand's vascular flora. The checklist has been compiled at the Forest Herbarium (BKF), Bangkok, as the preliminary investigation in the potentially threatened vascular plant in Thailand. The list was based on historic data from the herbarium sheets, the re-surveying areas where rare plant species had previously been collected. The list includes endemic and rare taxa, whereby the main criteria for rarity were: restricted distribution ranges and paucity of specimens collected. Most of the threatened species are endemic, but their range varies from widely distributed to narrowly confined to certain areas. A few species are locally very rare and occur only in specific habitats, although their range of distribution may sometimes extend to neighboring countries.





The list of the species is globally threatened species which frequently require a combination of conservation responses to ensure their continued survival. These responses encompass research, species-specific actions, site and habitat based actions, policy responses and communication and education. The majority of threatened species require substantially greater action to improve their status. While many species already receive some conservation attention, many others do not. Species can be, and many already have been, saved from extinction. However, this requires a combination of sound research, careful co-ordination of efforts, and, in some cases, intensive management. Improving the effectiveness of conservation requires a better understanding of the needs for such action across species, the extent to which it is being applied, and the effects it has had in preventing species extinctions.

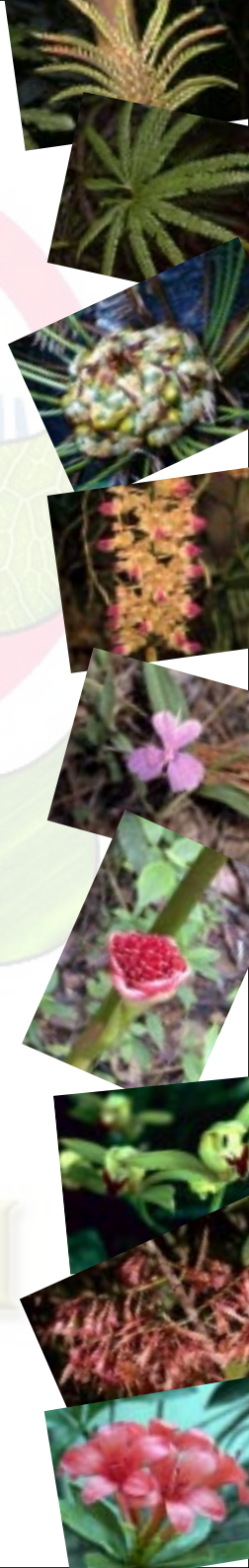
This work is only a first step to catalogue plant species for which conservation is a concern in the country. It is hoped that the checklist will serve its role as a basis for a thorough assessment of all vascular plants in Thailand using IUCN Categories and Criteria of threat. The list can be used to provide information on the conservation status individual species; guide the listing of individual species in national or international legislation; aid in conservation planning and priority setting; help to identify priority species for conservation action and recovery planning; and support educational programs.

It is also hoped that it will help the country implement the UN Convention on Biodiversity, especially in regard to the program on protected areas.



SUMMARY

Thailand Red Data : Plants is based on IUCN Version 1994 for endemic and rare species, and Version 2001 for vulnerable and endangered species. The list is divided into four main groups: pteridophytes, gymnosperms, monocotyledons and dicotyledons. The list also includes geographical and ecological distributions of each species. One thousand, four hundred and seven species are listed belonging to 135 families, of which 42 species and 17 families of pteridophytes, 27 species and 5 families of gymnosperms, 417 species and 19 families of monocotyledons, and 921 species and 94 families of dicotyledons. There are 764 endemic species including 87 species of orchids. Eight hundred and eighty species are classified as rare species comprising 363 vulnerable species and 142 endangered species. Finally, it is assumed that *Amherstia nobilis* Wall. (Leguminosae-Caesalpinioideae) is extinct in the wild.



Thai
CHM

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