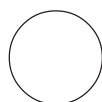

BRYOPHYTES IN THAILAND

Compiled by
Renoo Sornsamran
Obchant Thaitong



Office of Environmental
Policy and Planning

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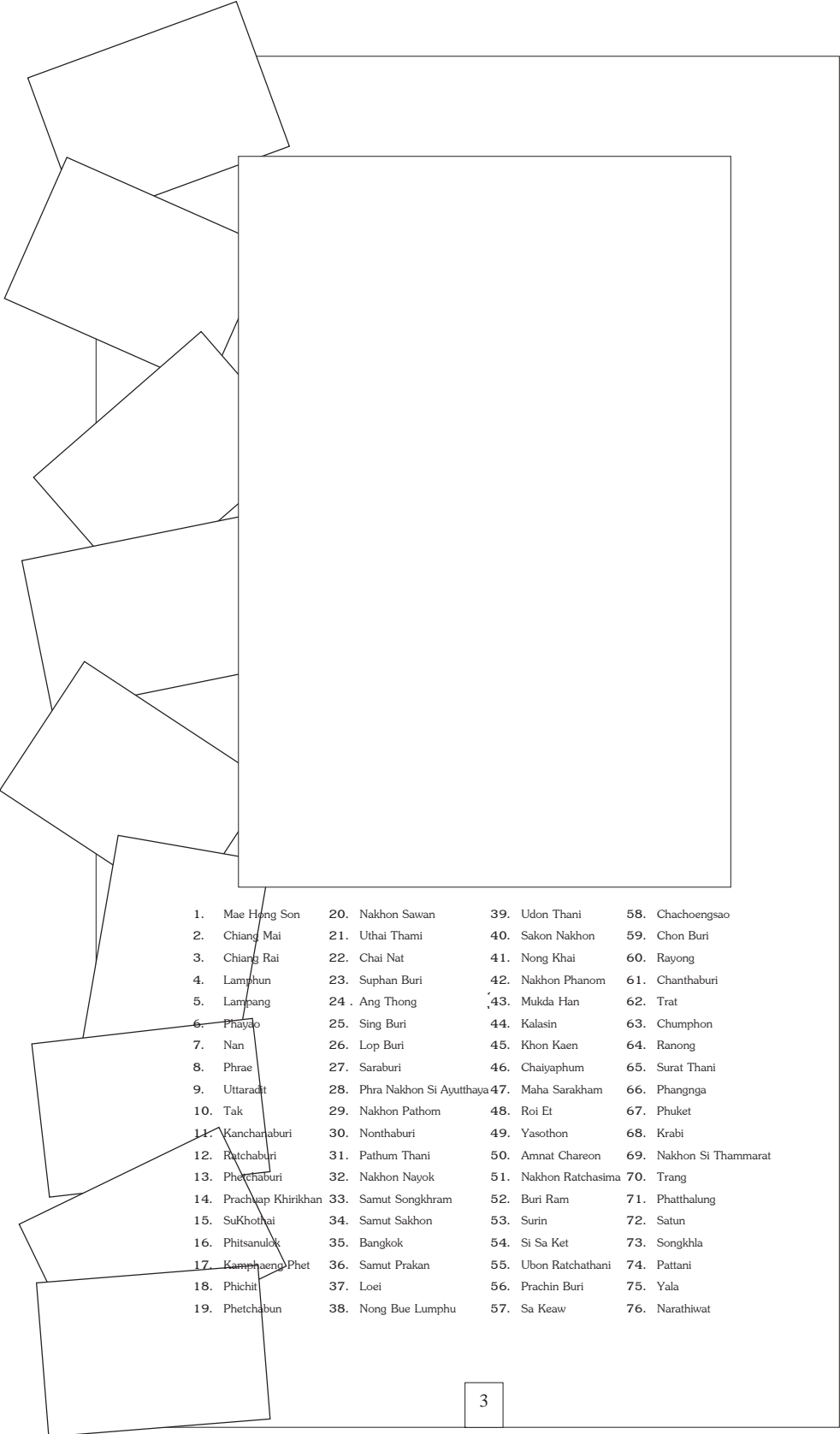
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|------------------------|------------------------------|-----------------------|-------------------------|
| 1. Mae Hong Son | 20. Nakhon Sawan | 39. Udon Thani | 58. Chachoengsao |
| 2. Chiang Mai | 21. Uthai Thani | 40. Sakon Nakhon | 59. Chon Buri |
| 3. Chiang Rai | 22. Chai Nat | 41. Nong Khai | 60. Rayong |
| 4. Lamphun | 23. Suphan Buri | 42. Nakhon Phanom | 61. Chanthaburi |
| 5. Lampang | 24. Ang Thong | 43. Mukda Han | 62. Trat |
| 6. Phayao | 25. Sing Buri | 44. Kalasin | 63. Chumphon |
| 7. Nan | 26. Lop Buri | 45. Khon Kaen | 64. Ranong |
| 8. Phrae | 27. Saraburi | 46. Chaiyaphum | 65. Surat Thani |
| 9. Uttaradit | 28. Phra Nakhon Si Ayutthaya | 47. Maha Sarakham | 66. Phangnga |
| 10. Tak | 29. Nakhon Pathom | 48. Roi Et | 67. Phuket |
| 11. Kanchanaburi | 30. Nonthaburi | 49. Yasothon | 68. Krabi |
| 12. Ratchaburi | 31. Pathum Thani | 50. Amnat Chareon | 69. Nakhon Si Thammarat |
| 13. Phetchaburi | 32. Nakhon Nayok | 51. Nakhon Ratchasima | 70. Trang |
| 14. Prachuap Khirikhan | 33. Samut Songkhram | 52. Buri Ram | 71. Phatthalung |
| 15. Sukhothai | 34. Samut Sakhon | 53. Surin | 72. Satun |
| 16. Phitsanulok | 35. Bangkok | 54. Si Sa Ket | 73. Songkhla |
| 17. Kamphaeng Phet | 36. Samut Prakan | 55. Ubon Ratchathani | 74. Pattani |
| 18. Phichit | 37. Loei | 56. Prachin Buri | 75. Yala |
| 19. Phetchabun | 38. Nong Bue Lumphu | 57. Sa Keaw | 76. Narathiwat |

 **F**OREWORD

With greater global consciousness on conservation and sustainable use of biological diversity, Thailand is obligated to further her effort in maintaining her own biological resources. In this regard, more emphasis is placed upon gathering information necessary for conservation of biodiversity in Thailand. At the most basic level, this information requires the collective data on type of species found. However, the majority of this data is still either unknown or not available for researchers.

Thus any compilations of available biological information for any group of species are always a welcome tool for researchers in Thailand. Bryophytes have been conservatively studied since 1990. However, the results of this study has never before been collectively and comprehensively published.

The book of Bryophyte in Thailand is consisted with the latest information from researches and studies by both Thailand and oversea experts. The Office of Environmental Policy and Planning (OEPP) hopes that this publication will prove to be a useful reference interm for researchers, conservationists and individuals interested in status of biodiversity in Thailand. The office also hope that the compilation of information in this book could, at certain extend, assist in furthering the study of bryophytes in Thailand.

(Sunthad Somchevita)
Secretary General
OEPP
1995



FOREWORD

Protection of biological diversity is a joint international responsibility and in the heart of the priority areas of DANCED (Danish Cooperation on Environment and Development). In the past literature about and efforts to protect biological resources often focused on one or a few species because of their unique features. This publication which DANCED has supported the preparation of is a welcome example of the change in focus that the recognition of the need to protect the diversity of biological resources has brought about. DANCED wishes to congratulate OEPP on making this useful information available to the scientific community for the benefit of the environment and biological diversity.

**Danish Cooperation
on Environment
and Development**



A CKNOWLEDGMENTS

The authors would like to express a sincere appreciation to the Office of Environmental Policy and Planning for the support in publishing this paper.

**Renoo Sornsamran
Obchant Thaitong**



SUMMARY



The records on bryophytes in Thailand from 1900 to 1979 has been taken from 24 papers (see bibliography). Most of the collections were conducted in Chiang Mai, Chiang Rai, Loei, Chanthaburi, Trad and Nakhon Si Thammarat. There are 237 genera and 925 species of bryophytes reported, comprise of 2 species of hornworts, 644 species of mosses and 279 species of liverworts.

Although, the list is still far from completion as more recent papers should be added, it is believed that this information will encourage botanists in the future to pay more attention on this group of small plants as they are one of the important member of the ecosystem.



I NTRODUCTION

The knowledge of the diversity and distribution of bryophytes in Thailand is very little known among Thai botanists, even there are subsequent reports about bryophytes in Thailand beginning from 1900. The problem is probably caused by the scarcity of references which were published in a rather small circulation journals. Therefore it should be very convenience for those new researchers who start to look at bryophytes as their materials for further studies if they have this compilation of preliminary information. The names of each Class, Order, Family, Species are shown in the tabular lists as well as the localities and references to previous published papers from 1900-1979.



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Class Bryopsida (Mosses)

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Class Anthocerotopsida (Hornworts)

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Class Hepaticopsida (Liverworts)

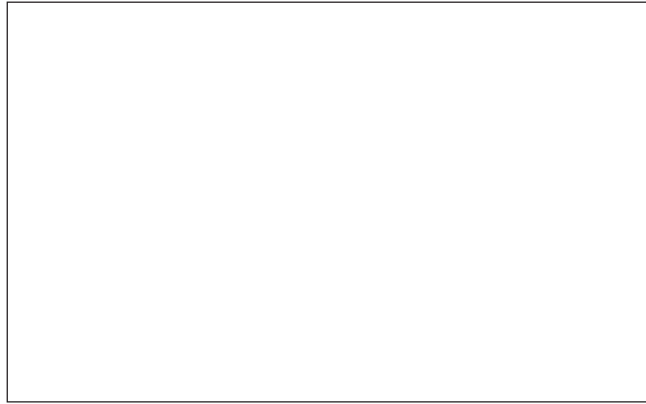
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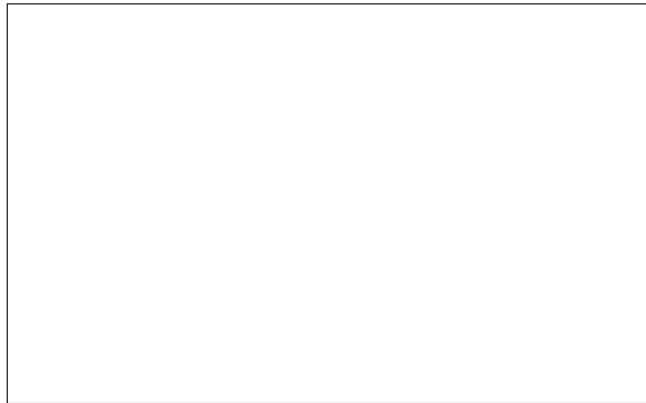
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Index of Species

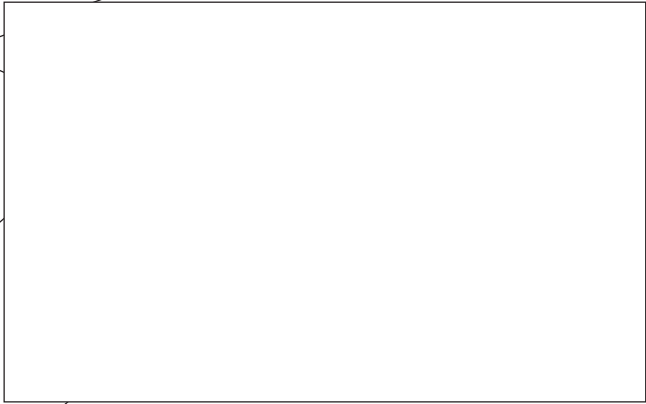
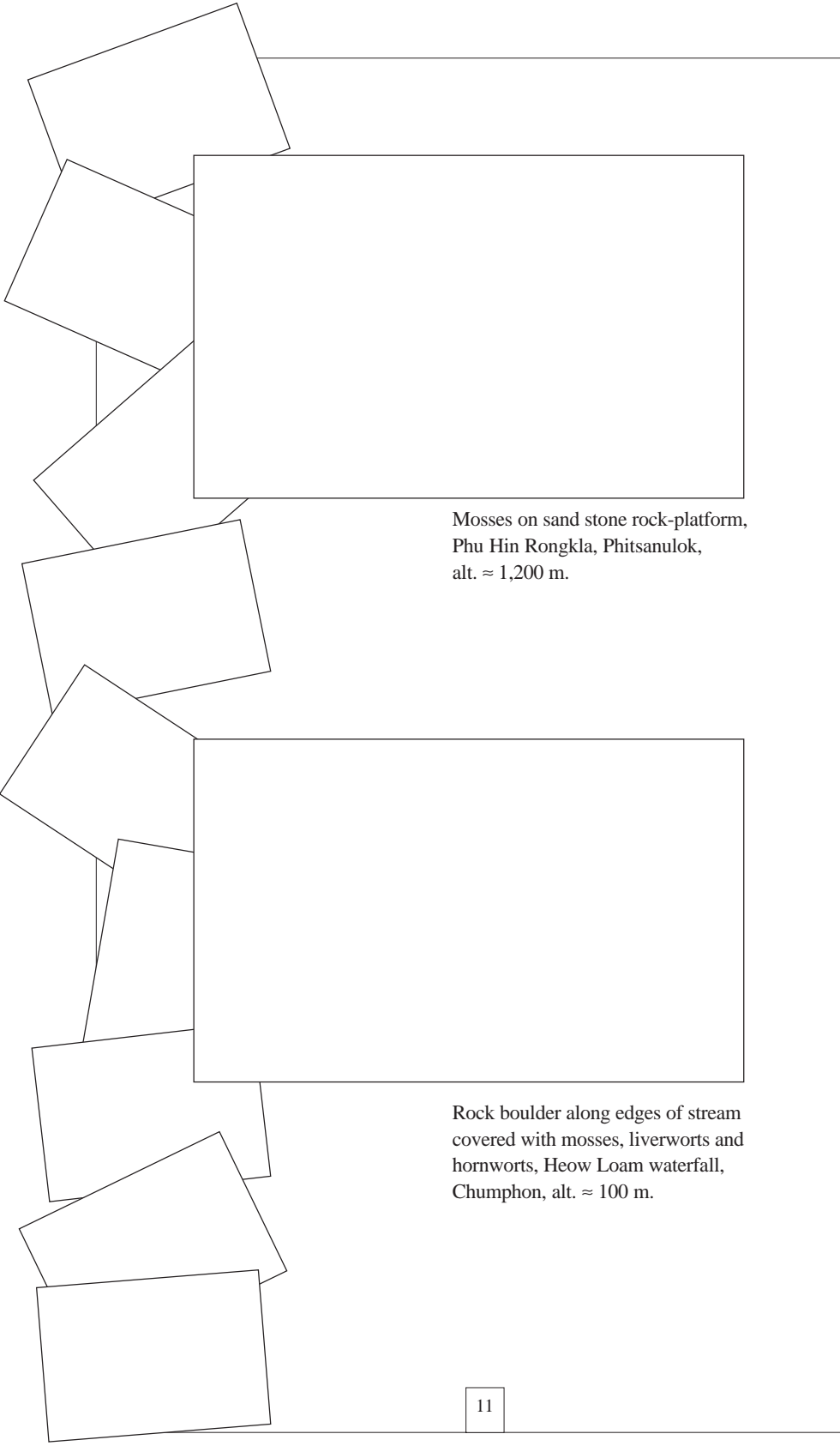
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Sphagnum bog, Angka, Doi Inthanon,
alt. ≈ 2,550 m.



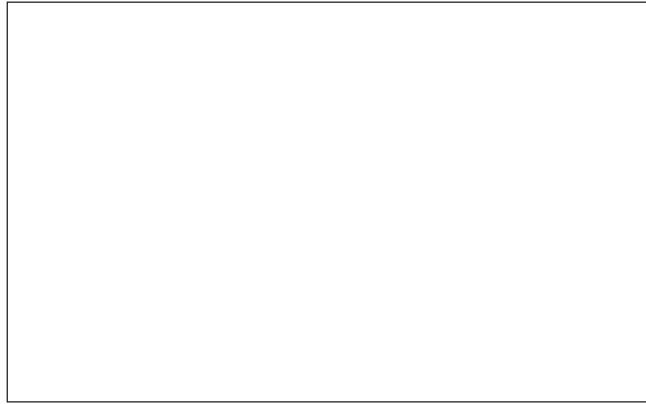
Mosses and liverworts covered
branches and tree trunk in mossy
forest, Angka, Doi Inthanon,
alt. ≈ 2,550 m.



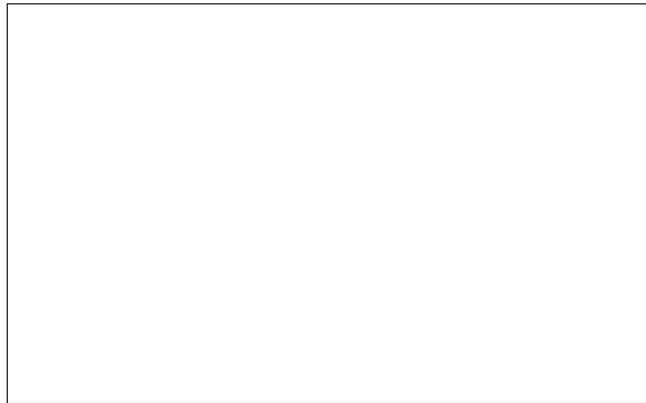
Mosses on sand stone rock-platform,
Phu Hin Rongkla, Phitsanulok,
alt. \approx 1,200 m.



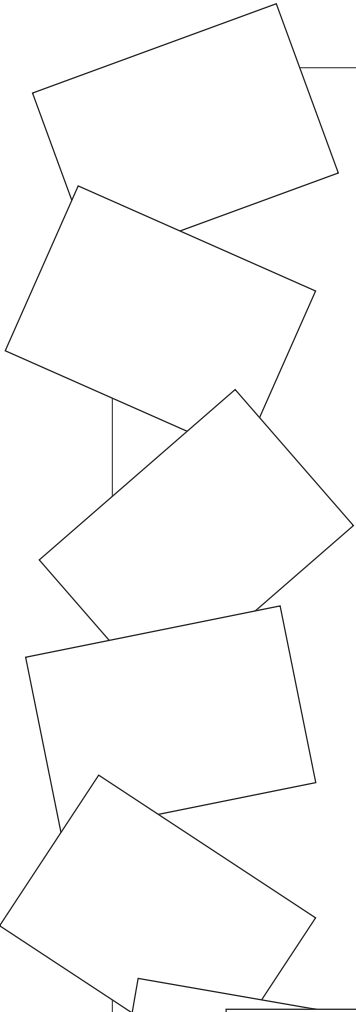
Rock boulder along edges of stream
covered with mosses, liverworts and
hornworts, Heow Loam waterfall,
Chumphon, alt. \approx 100 m.



Sphagnum sp. , Phu Hin Rongkla,
Phitsanulok, alt. \approx 1,200 m.



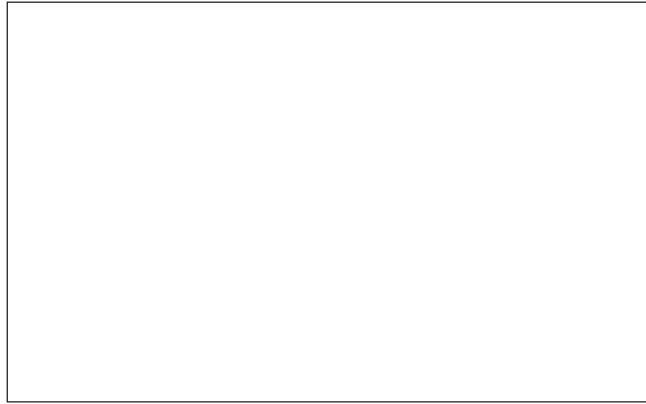
Pogonatum sp. , Doi Chiang Dao,
Chiang Mai, alt. \approx 1,800 m.



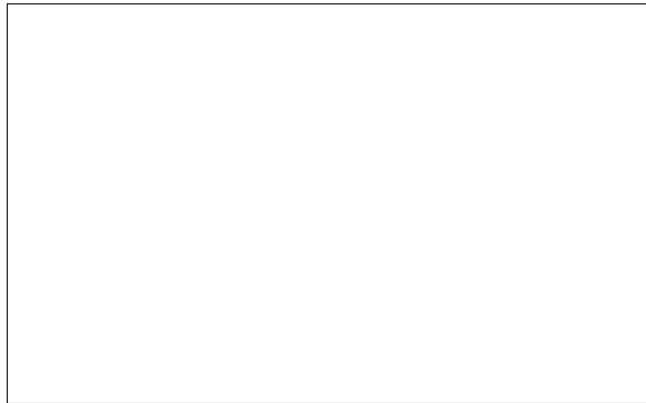
Philonotis sp. , Doi Inthanon,
alt. \approx 1,200 m.



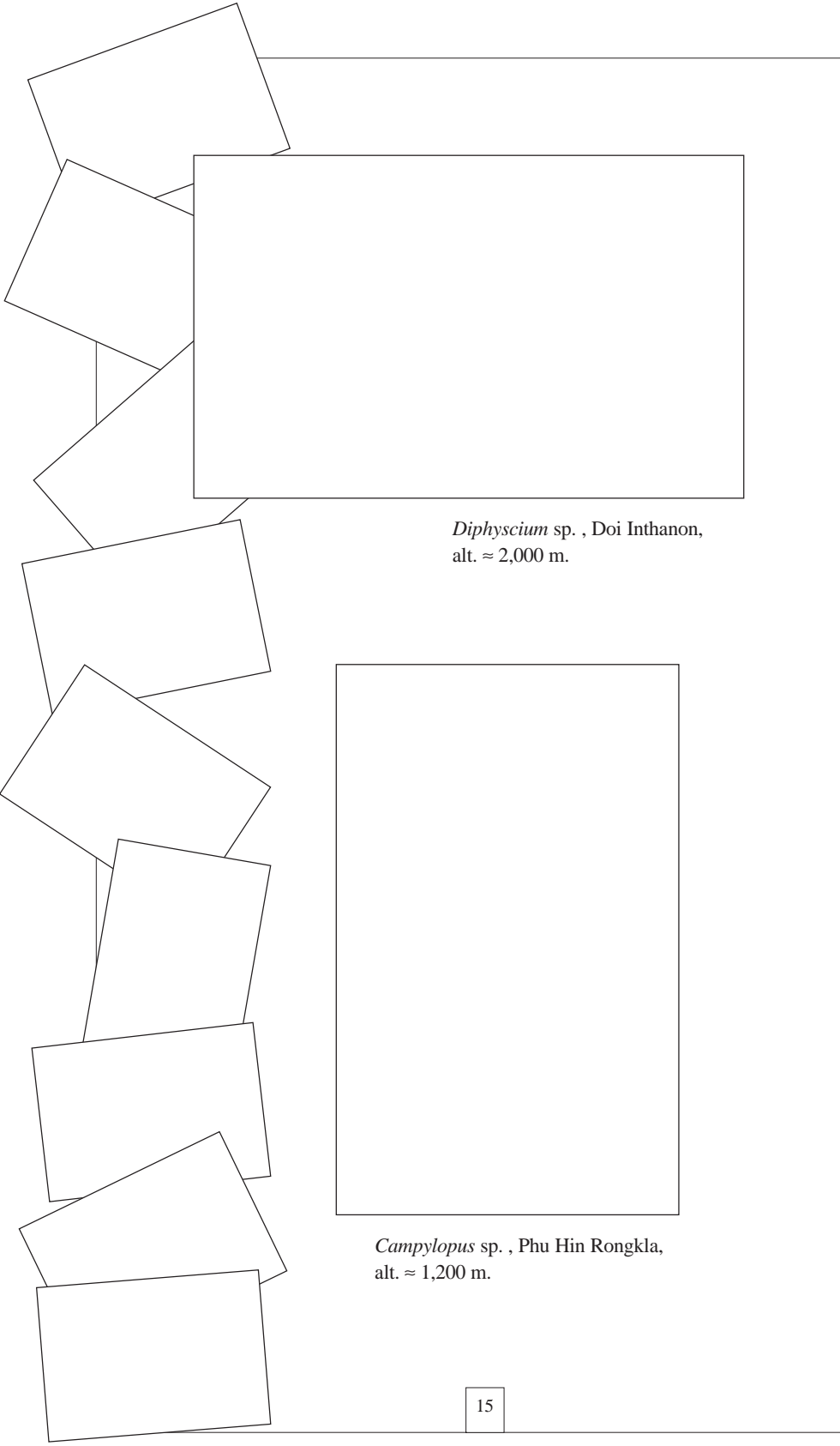
Octoblepharum albidum Hedw. ,
Ban Phu Khao Thong, Betong, Yala,
alt. \approx 600 m.



Pohlia sp. , Doi Inthanon,
alt. \approx 2,000 m.

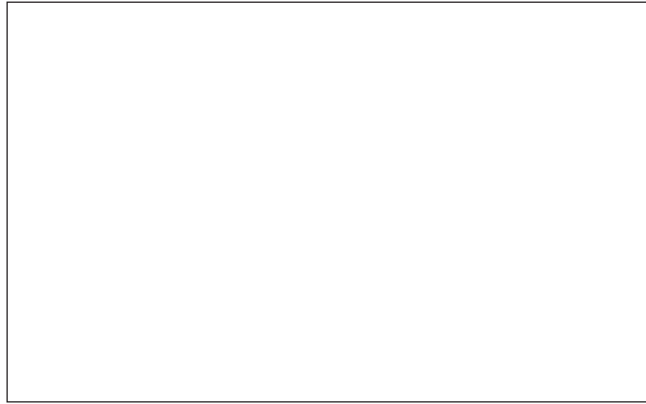


Bryum argenteum Hedw.,
Doi Inthanon, alt. \approx 1,500 m.

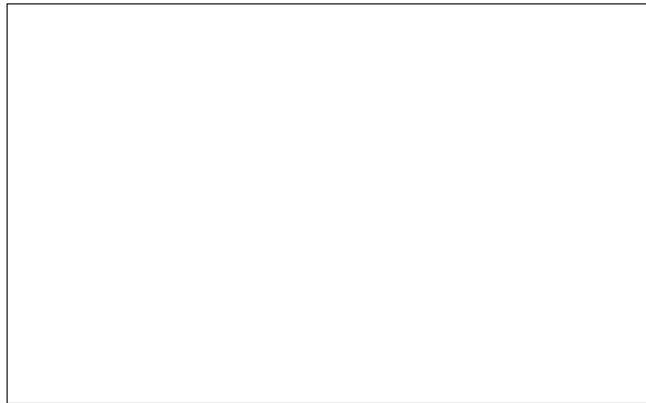


Diphyscium sp. , Doi Inthanon,
alt. ≈ 2,000 m.

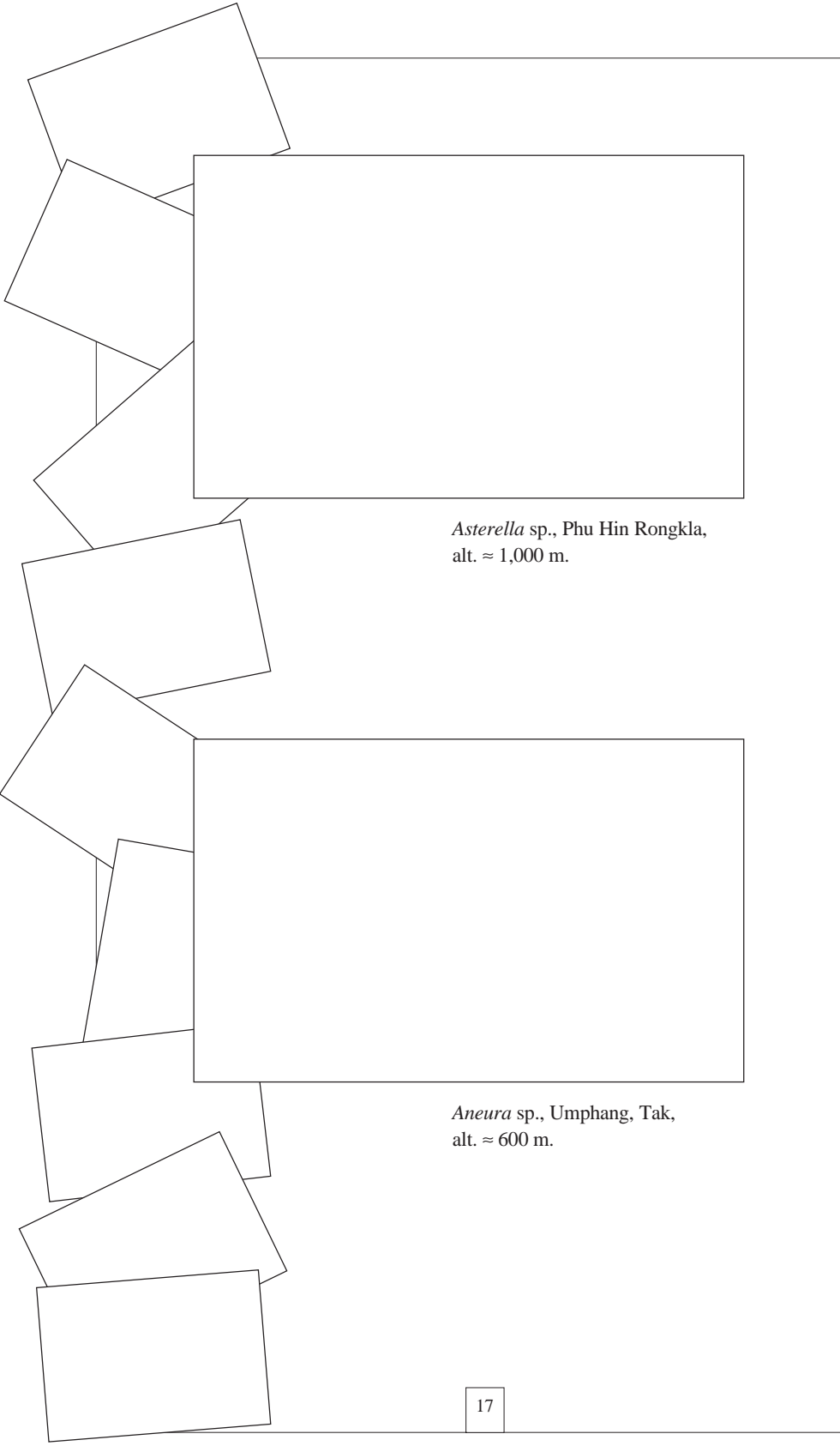
Campylopus sp. , Phu Hin Rongkla,
alt. ≈ 1,200 m.



Jungermannia sp. , Doi Inthanon,
alt. \approx 2,300 m.

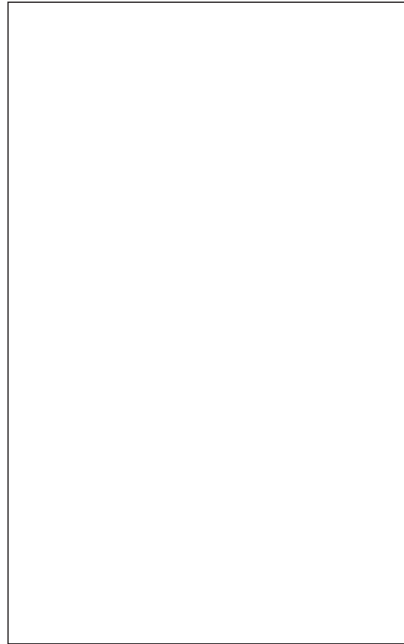


Frullania sp. , Doi Inthanon,
alt. \approx 2,500 m.



Asterella sp., Phu Hin Rongkla,
alt. \approx 1,000 m.

Aneura sp., Umphang, Tak,
alt. \approx 600 m.



Pallavicinia sp., Heow Loam waterfall,
Chumphon, alt. \approx 100 m.



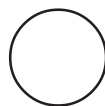
Anthoceros sp., Heow Loam waterfall,
Chumphon, alt. \approx 100 m.

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