



**Ferns and Fern-allies of Sikkim: A Pictorial Handbook – Part-I.** B. S. Kholia. Sikkim State Biodiversity Board and Government of India, Botanical Survey of India, Sikkim Himalayan Regional Centre, Baluwakhani, Gangtok 737 103, India. 2010. 207 pp. Price: Rs 750/US\$ 40.

The monumental and comprehensive works of R. H. Beddome, C. B. Clarke and C. W. Hope form the baseline for advancement of Indian pteridology. Even after the lapse of over a hundred years, these works are extensively used by the pteridologists in India and South East Asia, not only in taxonomy but also for morphology, anatomy and palynology. The first post-independence exploratory work on pteridophytes in East Himalaya, particularly Darjeeling and Sikkim Himalaya was presented by Mehra and Bir (1964). Subsequently, several reports, research papers, catalogues and detailed taxonomic accounts on the ferns and fern allies from various parts of India have been published. Most of these publications give purely technical descriptions of ferns and fern allies used by well-trained pteridologists and lack illustrations and colour photographs to aid field identification. Therefore, these books could not attract the attention of the general public, nature lovers and nurserymen towards ferns. More recently, two illustrated fern floras have been published for the northwestern Himalaya (by Khullar) and Kumaon Himalaya (by Pande and Pande). It is pertinent to note that during the last 50 years, the nomenclature of Indian pteridophytes has undergone major changes due to revisionary works and monographic studies. It has also come to



*Aleurtopteris dealbata* (D. Don) Fee

notice that many fern species of European, African or Neotropical origin are also reported from the Indian region. However, type specimens of such species collected outside India do not match with the Indian specimens and there is no general agreement about the identity of several species complexes in India.

The book under review is a field guide on the pteridophytes of Sikkim. It is an authoritative and well-illustrated account useful for taxonomists as well as naturalists. In fact, for the first time such a popular and well-illustrated field guide on ferns has been published in India that gives prominent features to aid identification. The author and Sikkim State Biodiversity Board deserve appreciation for such an initiative. The book (including a few references and index) begins with a message from a senior forest officer, followed by a foreword by the Director of the Botanical Survey of India (BSI).

The handbook begins with an interesting 'Introduction' to the ferns, giving illustrated accounts of technical terms. The young researchers in fern taxonomy and naturalists would find this section quite useful. The 'Introduction' is followed by a simple field key to the identification of ferns and fern allies (albeit with a few grammatical and spelling mistakes) based on field characters. The species are arranged in alphabetical order that makes field identification much easier provided the users have some basic idea about the major groups. In all, 150 species have been illustrated and described. For each species common name, local names if any, family (according to the latest and well-accepted taxonomic works), habit, habitat, distribution and 3–4 illustrations have been given followed by a brief morphological account. The photographs of the plant showing its

habitat, a key field character such as frond, sori or venation are given. A small section of the handbook has been devoted to edible and medicinally important ferns of the state. Yet another chapter deals with precautions while collecting the ferns for taxonomic studies, especially for students and nature lovers. The author has also cautioned the naturalists against over collection and given some tips for the *in situ* conservation of ferns, including establishment of a National Fern Garden.

There is no doubt that this handbook would serve the basic purpose of creating awareness about ferns among the naturalists. This publication has come in the International Year of Biodiversity, a timely action by the Sikkim State Biodiversity Board and BSI. It is hoped that the author/BSI would bring out a comprehensive and complete taxonomic account on the ferns of Sikkim Himalaya for a wider audience. Till then, this little handbook, priced at a nominal rate, should enthuse the naturalists, school teachers and trekkers to know about the common ferns of the beautiful Himalayan state.

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