

ANNOTATED CHECKLIST OF THE TREE FLORA OF BANGLADESH

by

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Trees are one of the most important elements of our terrestrial ecosystems. Between 2007 and 2009, Bangladesh completed an excellent compilation of her biodiversity – *Encyclopedia of Flora and Fauna of Bangladesh*. Its Volumes 5–12 have listed all vascular plants ever recorded in Bangladesh, including trees. But, till-to-date there is no exclusive account on the tree flora of Bangladesh. In absence of it, a checklist of the trees of Bangladesh is indeed a good starting point towards a Tree Flora of this country. *Annotated Checklist of the Tree Flora of Bangladesh* (Basak and Alam, 2015) is a superb contribution in filling in our knowledge gap on tree flora.

Overall, this new Checklist is very informative, well organized, reader- and user-friendly. Two esteemed botanists of Bangladesh, Shukla Rani Basak and Dr. M. Khairul Alam, have authored this 120-page-long book published by Bangladesh Forest Research Institute, Chittagong. In the Introduction (pages 1–4), the authors have briefly, but very efficiently, described the contents and organization of this book. This chapter is a must read before start using this Checklist. The introduction is followed by annotation of 1048 tree species found in Bangladesh, belonging to 432 genera and 99 families of gymnosperms and angiosperms. The publications ended with a list of literature consulted, and two indexes to vernacular and English names of the listed species.

I very much appreciate authors' a note of caution on using vernacular names of plants. I cannot help but quoting "It should be kept in mind that a vernacular name is not equivalent for a binomial. Someone getting an access to a scientific name through a vernacular MUST compare the botanical sample or voucher specimen with authentic Flora or taxonomic literature, or compare with an identified sample in a reputed herbarium." I hope the users of this Checklist will follow this important piece of advice in all possible situations.

While going through the publication, I have noticed at least three areas where the authors could have given more attention. First, from Acknowledgements (page iv), it is understood that expert opinion was sought for "inclusion of some species that vary in habits from shrub[s] to trees." This step rightly indicates the challenge of defining 'tree'. But this book has not made any attempt to define 'tree'. This Checklist has recorded more than thousand tree species of Bangladesh, which is far more than Das and Alam (2001)'s 342 species – one of the longest tree lists of the country. As I have personally gathered, unpublished tree lists of institutions working on Bangladesh's trees may also not exceed 500 species. Further, this Checklist has included gymnospermic and angiospermic trees, but excluded tree ferns. No explanation, however, has been given for this decision. It would have therefore been useful if the authors delineated 'tree' for this Checklist to avoid possible confusions among the readers.

Second, what types of trees are included in this account have been sufficiently described in the introductory chapter (page 3). It has virtually included all kinds of tree – from native to naturalized to exotic to recently introduced; from those growing profusely in the forests to individuals growing in private gardens. This broad listing, however, could be misleading. Because, without going through the book properly, we might see researchers and amateurs start quoting this Checklist and telling widely 'Bangladesh has 1048 tree species', which is obviously scientifically not appropriate. We have seen this happened before with *Red Data Book of Vascular Plants of Bangladesh* (Khan *et al.*, 2001). Citing this book, 106 plant species were extensively called

threatened in Bangladesh, whereas only 4 species were in fact threatened as per IUCN guidelines (Irfanullah, 2011).

Third, the authors have included the following species in this Checklist for which no published references are given, viz., *Araucaria cunninghamii* D. Don (Serial No. 001), *Acacia crassicarpa* A. Cunn. ex Benth. (No. 555), *Artocarpus altitis* (Parkinson) Fosberg (No. 584), *Prunus domestica* L. (No. 746), and *Chrysophyllum cainito* L. (No. 864). These are probably the ones advised by an expert and referred to as “some species those are not recorded in many consulted literatures.” (Acknowledgements section, page iv). It means these species are for the first time recorded for Bangladesh through this Checklist. This important fact, however, has not been recorded anywhere in this publication.

Other minor observations include referencing, which was found not consistent enough. In some cases the original papers were referred to. In other cases *Encyclopedia of Flora and Fauna of Bangladesh* were referred to, which is completely based on original, published literature. The Figure 1 is a forest map of Bangladesh based on ‘Source: Bangladesh Forest Department, 1999’. But the reference is not given in Literature Consulted section.

On the whole, the Checklist as a printed product is very good. The binding, the printing quality, and the page layout and formatting are good. The map (Figure 1), however, could have been with better resolution. From book publishing standards, I could not find International Standard Book Number (ISBN) of this publication. This could have been sought before the publication making it globally recognized.

The printed copies of this Checklist is not for sale, but for free distribution to interested people. This arrangement should encourage its wider circulation among the researchers and practitioners. It is also important that its electronic version is made available at least on the publisher’s website so that interested people can download and use without waiting for hardcopies. This will help this important work meet wider readership and help botanists, foresters and biodiversity enthusiasts to a greater extent in the years to come.

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