

P R E F A C E.

IN submitting this little book to the public, it is right that something should be said in explanation of the reasons that have led to its preparation; especially as it may to some appear unnecessary, after the many useful, and, in several respects, very excellent, works, that have been already published, in illustration of the Flora of Great Britain.

These have all, with the exception of the *Flora Scotica* of Dr. Hooker, been arranged upon the principles of a system, which, whatever popularity it may, from particular circumstances, have acquired, and however useful it may have been found in communicating a knowledge of the names of things, does certainly not now tend to the advancement of science, or to an accurate knowledge of things themselves. Of course I allude to the system of Linnæus; a system which has almost disappeared from every country but our own, and which ought now to find no other place in science, than among the records of things whose fame has passed away. Hence all our British Floras are, in this view of the case, essentially defective, with the exception already made. I might therefore, without impropriety, stop at this point of my explanation; but, in addition to the fundamental error now adverted to, there is another of even more importance. The technical language in which these works are written is far from accurate; terms are applied in them vaguely

and erroneously, and they so abound with mistakes, most of which are at variance with all correct notions of the structure of plants, that they are totally unfit to be placed in the hands of students. To these observations the *Flora Scotica* of Dr. Hooker, and the *Flora Edinensis* of Dr. Greville, are honourable exceptions.

When, therefore, I came to consider what work it would be most proper for me to recommend to the Botanical Class in the University of London, I could not but be forcibly struck with these reflections; if I selected any of our general Floras, they would not only not answer my purpose in explaining that system which alone ought to be taught in detail, in the present state of botanical science, but they would also be totally at variance with the statements I should find it my duty to make to the class. If I made choice of the Floras of either my friends Hooker or Greville, those works would be continually, from their confined range, inapplicable to the circumstances of a Class of Botany in London.

For these reasons I determined upon preparing a work upon those principles, of which the greater part of Europe has now become the advocate, and which might, if destitute of all other merit, at least possess the recommendation of being commensurate with the present state of botanical knowledge. In effecting this, I have proposed to myself the following objects:—

Firstly, to reduce the language in which plants are described to a uniform standard, in correspondence with the purest principles of the science, but divested of unnecessary technicalities. By this it is hoped that some impediments will be removed from the path of the student, and that his mind will be kept continually alive to those beautiful theories of structure, which not only constitute one of the most interesting departments of Botany, but give its chief claim to the name of a science.

In the second place, I have attempted to render the

nomenclature of genera and species conformable to that of Continental writers of the highest authority. Prejudices in favour of ancient errors have, in some cases, been allowed among us to take the place of modern discoveries; and, in other instances, we have continued to employ names, in the use of which we have perhaps been, strictly speaking, in the right, but which it has become inconvenient to retain, in opposition to the rest of Europe. In this, however, I hope such discretion has been exercised as has protected the rights of English Botanists, wherever they have deserved protection.

Many genera appear now, for the first time, in an English Flora, and to some it may seem that this is the reverse of an improvement. Undoubtedly, if the British Flora is considered without reference to other countries, a less minute subdivision of some orders might suffice; but when it is viewed, not as an isolated Flora, but as a small fragment of the vegetation of the world, such an opinion will, probably, be changed. Besides, our daily experience shows us that excessive analysis is far preferable to excessive synthesis, especially for the purposes of students; the former leads to no other inconvenience, than that of increasing the degree of investigation which plants must receive to be understood: the latter has a constant tendency to render investigation superficial, and characters confused. Upon the niceties by which the genera of many orders, such as Gramineæ and Orchideæ, are distinguished, some of the most curious parts of Botany will be found to depend.

In species I have chiefly followed the English Flora of Sir James Smith. That work is, undoubtedly, the best which we yet have seen upon species, and must always remain a standard book for British Botanists. In proof of the esteem in which I hold it, it has been made the basis of the present work, and I have generally adopted its specific characters, the phraseology in which they were

expressed having been carefully revised. I trust, however, that several things will be found altogether new to the Botanist; and that the following pages will show that, even in so well-beaten a field as that of Great Britain, many interesting discoveries, even in the species of Flowering Plants, will yet reward the active and accurate observer. The most remarkable additions are, *Erica ciliaris*, found in Cornwall, and *Molinia depauperata*, from the Clova Mountains. Of the former, I have very lately received specimens from near Penryn, in Cornwall, through the kindness of Sir Charles Lemon, of Carclew, so that that very interesting plant is now confirmed to our Flora. To the genus *Rubus* I have made large additions; but it is probable that still larger yet remain to be made. The species have been hitherto overlooked by our British Botanists; and I do not doubt, that they would have escaped my notice also, if I had not enjoyed the opportunity of studying them in a living state, in the garden of the Horticultural Society. In this noble collection they are all growing: I have observed them for several years, and I am satisfied that their distinctions are permanent and important.

But, above all things, I have laboured to remove the difficulties that at present attend the study of the natural affinities of plants, both in this country and elsewhere. For this purpose I have prefixed to each class and order analytical tables of their contents; in these tables the most important or obvious characters are employed to distinguish one thing from another, and the less important peculiarities are kept out of sight. By which means I hope that the subject will be found simplified, and that as great a facility will have been given to acquiring an incipient knowledge of Botany, as can be offered even by the Linnaean system. It must, however, be borne in mind, that these tables are entirely artificial, and have not been constructed with reference to any thing beyond what is to be