In summary, this book contains a number of useful chapters on the study of plant cell walls. However, despite the editors' far-fetched explanations in the preface, it remains a mystery why the title 'plant fibers' was chosen, and why some chapters on unrelated subjects were included.

Pieter Baas

A provisional list of wood samples in the collections of Liverpool Museum. John Edmondson, Angus Gunn and John Malpas, iv + 81 pp., 1989. National Museums & Galleries on Merseyside Occasional Papers, Liverpool Museum, No. 4. Price: UK£ 6.95 (paperback).

With a reproduction of a Victorian engraving of a large log of Honduras Mahogany from the Illustrated London News on its front cover, this wood collection catalogue is easily the most attractive one in existence. Interest in the Liverpool wood collection has recently been revived after a long dormant period. It now incorporates the Alfred Dobell timber collection (1861), the Roberts Timber collection (1971), the Liverpool Salvage Corps' collection, the Levy timber collection, and the timber collection from the British Museum, Natural History (the latter three collections acquired in 1986). So far 3000 samples have been catalogued, but many specimens from the British Museum collections still remain to be catalogued. Scientifically these uncatalogued collections may well be the most interesting of the Museum, including those brought together by e.g. Cowan (Madagascar), Kingdon Ward (Tibet), Pancher (New Caledonia) and Zeyher (Southern Africa).

The wood samples catalogued in this book contain a high proportion of well-known commercial timbers duplicated in many major institutional wood collections, but also some historically and scientifically interesting collections, sometimes from undercollected regions such as the ones by Schweinfurth (Egypt) and Ridley (Malaysia). The catalogue is alphabetical by family, genus, and species, with information on vernacular name, collection source, code and newly added xylarium number (for data

retrieval). There are additional indexes by genus (redundant in view of the arrangement of the main catalogue) and by vernacular names and country of origin (both very useful).

In the introduction the authors solicit suggestions for corrections and updating; a very appropriate request in view of the likelihood that much original label information on old wood specimens is now nomenclaturally or taxonomically out of date (still assuming that the original botanical identification had been correct). Yet, the curators of the Liverpool Museum (LIVw in Stern's Index Xylarium) are to be congratulated for presenting such an informative catalogue. One could only wish all curators of institutional wood collections would produce one like it.

Pieter Baas

Genetic effects of air pollutants in forest tree populations. F. Scholz, H.-R. Gregorius and D. Rudin (eds.), viii + 201 pp., illus., 1989. Springer Verlag, Berlin, Heidelberg. Price: DM 75.00 (hard cover).

One of the reasons why it is so difficult to convince people about general affects of anthropogenic influences on tree vitality is that within stands with declining trees, there usually are also a high number of completely vigorous trees, apparently coping well with the effects of acid deposition, high ammonia or ozon levels, or any other pollutant. Awareness of genetic differences in sensitivity to pollutants then has to be inspired by pointing out the whimsical differences between individual human beings in contracting lung cancer through smoking or not. The present book gives a more scientific basis to the above oversimplified comparison by presenting a number of papers on: 1) variation in response by trees to pollutants; 2) selection effects of pollutants; and 3) preservation of genetic resources. They constitute the proceedings of a meeting held by three IUFRO working parties in Großhansdorf. Although wood anatomy and wood quality variation are not included, the book is of great interest to all involved in the study of trees and wood from forest decline regions.

Pieter Baas