The book is well-produced, and there are few proof-reading errors, but there are occasional signs of lack of care, for example 30‰ salinity is given on every occasion as 30%, and the haphazard spelling of heterokaryon with a 'k' or a 'c' is irritating.

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Plant–Atmosphere Relationships: by JOHN GRACE. (Outline Studies in Ecology) Chapman & Hall, London, 1983. 92 pp. Price £2.95.

This is likely to prove a useful reference book for anyone contemplating work on the radiation balance of leaves. It condenses a large volume of information into relatively little space, though it tends as a result to read a little like a series of lecture notes built up of short factual statements. The book concentrates, as might be expected, almost entirely on leaves and leafy canopies and is not the place to go searching for information about flowers or stems for example. It is liberally spread with abundant examples, and numerous graphs and equations.

The text appears to be concise and free from any major errors, though a few minor points in the layout were annoying, these being essentially editorial problems. For instance Box 3.1 and Box 3.2 are first referred to on pp. 42 and 43, respectively, without any clue as to their whereabouts, and they do not in fact appear in the text until pp. 54 and 55. Equally, the keys to the individual sections of the figures normally have the letters (a), (b), etc. preceding the descriptions, but in Fig. 5.4, they follow the descriptions instead, this being confusing because the descriptions follow on each other consecutively. Printing errors are minimal, and often of little importance, as for instance the misplacement of the subscript s on r_s at the foot of p. 50.

The diagrams of the sections of a leaf and a chloroplast in Fig. 2.8 are poor, and on the whole I prefer his comparison of chloroplasts with currant buns to his earlier analogy of them to saucers (p. 29), though one is left wondering whether either is necessary in a book which is presumably aimed at an informed readership. Two further minor points, firstly, sulphur dioxide is the only atmospheric pollutant listed in Table 1.4 which is purported to owe most of its global production to the activities of man, yet no man-made origin is given in the 'sources', and secondly, are not responses 'elicited' rather than "illicited" (p. 26)?

Apart from these 'niggles', this book is a useful compendium of information, and, through a good reference list, directs the reader to other relevant literature. Complicated issues, such as air flow over leaf surfaces are explained very clearly, and as a whole the book fills a vacant niche in the 'outline studies' market very well, though the reader at research level will probably have to progress to larger and fuller texts.

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