BOOK REVIEWS

that he has felt optimal for meeting the requirements of his target readership, it appears that for the uninitiated reader, the text is somewhat disorganized to get a comprehensive picture of biology and biotechnology potential of the fungi. For example, the Section I in Chapter 2 deals with heterotrophic carbon nutrition before the aspects of vegetative growth, reproduction and ultrastructure are presented. Nutrition and metabolism including metabolic pathways of carbon utilization are described in Section II. Fungal ecology and distribution (Chapter 8, Section II) should have come in the first section since it cannot be adequately justified to find a place under Fungi in Action. In providing the subtitles and making the descriptions brief or replacing the text with several tabular statements, the author seems to have made it somewhat difficult for gaining a full appreciation of the subject, particularly to the inexperienced student of mycology and fungal biotechnology. There is a paucity of vital information in the text on topics such as fungal biodiversity, selective techniques for pure culture isolation, conservation and identification, genetic variation in in vitro cultures, sporulation, dormancy and mechanism of survival in the natural environment. In the area of genetic engineering involving fungi (page 512), for example, no reference is made to the recent spectacular developments of using filamentous fungi as hosts for heterologous expression of eukaryotic and mammalian proteins like chymosin. That fungi are increasingly becoming preferred hosts in molecular biology due to their efficient protein-secreting potential has also not been mentioned.

In the chapter on Biotechnology, it is surprising that gibberellins are treated under non-industrial products and the description of the whole fermentation is mentioned in just a few lines giving only trivial and insignificant details (page 564). Likewise the description of β-carotene fermentation (page 562) by mucoraceous fungi without detailed mention of the involvement of heterothallic strains and formation of zoospores is a serious omission in a treatise dealing with biology of fungi.

Several additional discrepancies can be listed but it is adequate to state that the text while providing information on several aspects of fungal metabolism, biochemistry and biotechnology lacks the essential emphasis on those critical aspects which will enable the reader to obtain a comprehensive picture of the biology and biotechnology of fungi. Several errors (e.g. 'hemicellulose is half cellulose molecule' (page 22) and reference to Fig. 2.1 (cellulose) under hemicellulose), spelling mistakes and ambiguous construction of sentences/descriptions (e.g. comparison of fungi and ant colony under social organization (page 11)) also deter the value of the book to a considerable extent. References cited to original papers include many which are not readily accessible to the readers. Perhaps references of relevance to some authoritative reviews on special topics in Annual Reviews etc. would have been more helpful and useful to the readers.

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