

values obtained in this case were 503 ± 9 U/l, $n = 10$. The similarity of this last mean result with those of the earlier assays is fortuitous since it does not represent a valid estimation of amylase activity. Obviously, the reaction continues during centrifugation, and this activity has apparently cancelled out the reduced activity obtained while the reaction mixture was achieving the reaction temperature. However, it does conclusively indicate that the enzyme activity is associated with the insoluble substrate, not the supernatant, and continuous shaking cannot be expected to change the results.

References

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Dehydrated Test Strip for the Detection of Yeasts

We, too, have evaluated the dehydrated test strip designed for the detection of yeasts (Davies, R. R. and Savage, M. A. *J. clin. Path.*, **28**, 750, 1975).

The selective medium of the strip sustained the growth of various isolates of *Candida albicans* and *Torulopsis glabrata*, as well as that of *C.stellatoidea* (LSHTM 3107), *C.tropicalis* (LSHTM 3111), *C.pseudotropicalis* (LSHTM 3105), *C.parapsilosis* (LSHTM 3104), *C.krusei* (LSHTM 3100), *C.guilliermondii* (LSHTM 3099), *C.pelliculosa* (LSHTM 3115), *C.pulcherrima* (LSHTM 3172), *C.reukaufii* (LSHTM 825), *Pichia guilliermondii* (CBS 2031), *Rhodospidium toruloides* (CBS 14 and 349), *Saccharomyces cerevisiae* (CBS 1171), *P.ohmeri* CBS 1950), *P.burtonii* (CBS 2352), and *R.diobovatum* (CBS 6084 and 6085). It would not support growth of *S.uvarum* (CBS 395).

Thus, the strip will detect yeasts of non-pathogenic genera as well as non-pathogenic species of the genus *Candida*. It detects perfect fungi, mating types which

are the imperfect states of some perfect fungi, and imperfect fungi. Many of these yeasts can be isolated from the vagina (Hurley *et al.*, 1974). Although yeasts other than *C.albicans* or *T.glabrata* will be isolated from only 1-3% of specimens submitted for diagnosis of morbidity of the lower genital tract, if the strip is used without recourse to the traditional methods of isolation and identification of yeasts, misleading reports would occasionally be issued.

Grown on Sabouraud's agar	36
Grown on Microstix Candida (MC)	34
Direct microscopy	23

Table Number of swabs with yeasts

We agree with Davies and Savage (1975) that culture on Sabouraud's agar is more sensitive than culture on MC, and that direct microscopy detects less yeast carriage than either culture medium (table).

References

- Davies, R. R. and Savage, M. A. (1975). Evaluation of a dehydrated test strip for the detection of yeasts. *J. clin. Path.*, **28**, 750-752.
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Book reviews

An Introduction to Liquid Scintillation Counting. By A. Dyer. (Pp. 111; 21 tables; 26 figures; £3.60.) London: Heyden. 1974.

Since it was first introduced in 1950, the technique of liquid scintillation counting has been of major importance in medical and biological work with β and γ -emitting radioisotopes, and the subject has developed a vast literature and much folklore.

The author has performed a useful service in bringing together in this short book a very wide range of information concerning the techniques and applications of liquid scintillation counting. There are eight chapters, an extensive, selected bibliography, an appendix, and an index. The first three chapters deal with the basic techniques, while the remainder cover in detail specific topics, including sample preparation for materials labelled with ^3H , ^{14}C , and other nuclides; the problems of quenching; the choice of sample vials; and the role of Cerenkov counting. Comments on sample preparation techniques are thoughtful: the relative merits and disadvantages of toluene and dioxane as solvents when aqueous samples have to be measured are critically discussed, and the merits of emulsion counting for such samples are clearly set out, together with some of the problems accompanying this technique. There is a clear description of the characteristics of the various primary and secondary solutes. The author supports Fox in urging manufacturers not to promote 'secret recipes', the use of which may result in unsuspected errors arising from the formation of colloids.

Unfortunately, the descriptions of the counting systems form a relatively weak section of the book and appear to rely too heavily on 'manufacturers' jargon' (for example, 'balance point counting'), and too little distinction is made between improvements in the basic counting technique and the important, but surely quite distinct, provision of mechanical systems for handling large numbers of samples. The role and limitations of coincidence counting in reducing the effect of chemiluminescence are discussed only obscurely (Chap. 7, p. 78): 'Lastly, it must be mentioned that instruments are available fitted with photon monitoring which can distinguish between true sample counts and the single photon events occurring in

a counting bottle caused by other light-producing processes.' Surely, this 'photon monitoring' is the coincidence counting already discussed in Chap. 3? A few minor criticisms:

What is an ANS iron counter? (p. 22)

The word 'emanation' is used instead of 'emission'. (p. 2)

It is suggested (p. 3) that ^{51}Cr can be measured only through its x -ray emission, although Table XIII gives the correct information concerning the radiations emitted by this radionuclide.

This reviewer found the section on counting statistics and the use of the E^2/B criterion confusing.

In the preface, the author expressed the hope that the book will be of value as a textbook for courses, *inter alia*, in health physics; as this was one of the author's intentions, it is surprising that nothing is said about the problems of disposing of radioactive liquid scintillation solutions, where the dual hazards of radioactive contamination and fire arise.

Despite these criticisms, the book does provide a great deal of useful material in a compact and well-produced volume at a price which is modest by current standards.

N. G. TROTT

IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man, Volume 6. Sex Hormones. (Pp. 243; Sw. Fr. 18.) Volume 7. Some Anti-thyroid and Related Substances, Nitrofurans and Industrial Chemicals. (Pp. 326; Sw. Fr. 32.) Lyon: International Agency for Research on Cancer. 1974. Distributed for IARC by the World Health Organization.

The two latest additions to the series of IARC evaluations of chemical carcinogens in man deal with 16 preparations of sex hormones (Vol. 6) and with a variety of antithyroid substances, nitrofurans, and industrial chemicals (Vol. 7). The format is similar to that in the previous IARC monographs, and volumes 6 and 7 both provide useful summaries of experimental, clinical, and epidemiological literature. It is, however, obvious that current knowledge is still incomplete when it comes to evaluating human carcinogenic risks from some of the compounds considered here—particularly vinyl chloride and the sex hormones. Inevitably, the present accounts cannot be anything other than interim appraisals. Already additional information has appeared since some of

the chemicals were considered in Lyon—for example, in relation to hepatic lesions in women on oral contraceptives, and for diethylstilboestrol as a transplacental carcinogen. IARC clearly recognizes the general problem by indicating that the status of some of the chemicals evaluated in the monographs will be periodically reappraised and, where necessary, the existing published account will be revised. This is an essential activity and one which will have to continue over many years.

In volumes 2 to 6 of the IARC monographs, the compounds being evaluated have been arranged very satisfactorily according to their broad chemical characteristics; the miscellaneous collection of compounds which appears in volume 7 as 'industrial chemicals' is an imprecise and generally less satisfactory grouping. The importance of three of the chemicals discussed—benzene, vinyl chloride, and the polychlorinated biphenyls—is beyond dispute but reasons for including some of the other compounds are less apparent.

R. L. CARTER

Lymphoproliferative Diseases. Edited by D. W. Molander. (Pp. xx + 570; illustrated; \$39.50.) Illinois: Charles C. Thomas. 1975.

Some of the 17 chapters in this new volume entitled *Lymphoproliferative Diseases* are excellent. The compiling and editing, however, are open to criticism. The book is claimed to be 'a compilation of known facets of lymphosarcoma (sic) and related diseases', yet Hodgkin's disease is excluded, and instead there are chapters on sarcoidosis and eosinophilic granuloma. The pathological terminology used is quite inconsistent from chapter to chapter. Nevertheless we read that 'The new pathologic designations (sic) are included'. 'Also new is the new staging . . . employing the latest diagnostic methods including lymphangiography, isotopic scintigrams, etc.' This is a rather surprising remark for 1975.

The chapters of particular value include D. G. Miller's on immunological aspects of lymphoproliferative diseases, and the chapter on radiotherapy in the non-Hodgkin's lymphomas by M. Tubiana and colleagues. This latter is extremely comprehensive and up to date. Two other chapters worthy of note are on Macroglobulinaemia (M. Mannik) and Myeloma (I. Snapper and A. Kahn).

The chapter on animal lymphoma is of interest but again reflects poor editing.

The relationship of human and animal lymphomas and the experimental work possible on spontaneous animal, especially primate, lymphomas is of great relevance, and is fascinating. But why include such detail on the treatment of dog lymphoma, including 'supportive treatment', and then separate details for the therapy of each of cat, mouse, and cattle lymphoma?

The overall impression is that this is an ephemeral publication and one that is uneven, often superficial and sketchy, and in many respects already out of date. It is not of value as a reference work, and one cannot recommend it as an essential acquisition for hospital libraries. It would justify inclusion in the library of a centre dealing with lymphomas, but not as a priority.

G. P. CLEIN

Immunology of Trophoblast. Edited by R. G. Edwards, C. W. S. Howe, and M. H. Johnson. (Pp. x + 284; illustrated; £6.00.) London: Cambridge University Press. 1975.

This book is the outcome of a meeting held in 1974 at which 22 authorities, mostly British, discussed the role of the trophoblast during pregnancy, particularly in relation to the immunological puzzle of why the allogeneic fetus is not rejected. Immunization by placental antigens, immunosuppression by trophoblast products, and various aspects of immunoneutrality and immunoprotection are all gone into in depth. A major feature of the book is the unusually long and lively discussions of each paper which catch the spirit of frustrated excitement that this elusive subject always generates, and which include many provocative suggestions for further experiments. There are copious references and a good index. In the present state of knowledge, it is hard to think of a better way of treating this subject, and the two further volumes on related topics that are promised should be welcome.

J. H. L. PLAYFAIR

A Short Textbook of Haematology, 4th edition By R. B. Thompson (Pp. 387; 13 plates; £5.50.) London: Pitman Medical. 1975.

This handy paperback has reached its fourth edition within 15 years and surely needs little further commendation; it is excellent for its intended clientele—senior