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. pulchermitis (LSHTM 3172), C. reukaufii (LSHTM 825), Pichia guilliermondii (CBS 2031), Rhodospirillum toruloides (CBS 4143 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
Grown on Microstix Candida (MC) 36
Direct microscopy 34

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


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Book reviews


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 radionuclides, 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, 14C, 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 chemical luminescence 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

References

Davies and Savage (1975).