

base composition of typical *E. coli*, while *P. aeruginosa* DNA is quite different (Sueoka, J. Molecular Biol. **3**:31, 1961).

A similar inhibition phenomenon, traceable to phage adsorption and bacterial killing without phage multiplication, was observed with five strains of *S. marcescens*. Here the difference between P1*kc* and P1*kc vir* was reversed, the latter being less effective at equal concentrations. Note that *S. marcescens* has a DNA base composition different from either *P. aeruginosa* or *E. coli*, but can support the continued growth of an episome, the fertility factor F, apparently

consisting of *coli*-type DNA (Marmur et al., Proc. Natl. Acad. Sci. U. S. **47**:972, 1961).

This work was supported by grant G-8808 from the National Science Foundation to S. E. Luria, to whom the author is indebted for guidance and help. The author wishes to thank B. W. Holloway, E. H. Kass, and B. Postic for the gift of *Pseudomonas* strains, and M. I. Bunting and M. T. M. Rizki for the *Serratia* strains. The electron micrographs were taken by R. F. Bills, whose kind cooperation is gratefully acknowledged.

AN IMPROVED METHOD FOR THE DETECTION OF SPORE DISCHARGE IN THE SPOROBOLOMYCETACEAE

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Received for publication October 2, 1961

In heavily sporulating strains of yeasts belonging to the *Sporobolomycetaceae*, ballistospore formation can be observed easily on the surface of malt agar. Spore discharge is studied commonly by inoculating the yeast on malt agar or on potato glucose agar in a petri dish and inverting the dish. Due to the discharge of ballistospores, a mirror image is formed on the lid below the agar. A pair of slides, separated by a glass support, may be used in the same fashion (Lodder and Kreger-Van Rij, *The yeasts*, North Holland Publishing Co., Amsterdam, 1952). In poorly sporulating cultures, a mirror image is not evident, but the test becomes more sensitive if two bottoms of petri dishes are used, both containing growth medium. The few discharged spores then germinate and form colonies in the bottom dish. A sterile glass slide may be included in the lower dish to collect spores for microscopic observation.

Recently we isolated an interesting new species of yeast (Phaff and do Carmo-Sousa, *in press*). Neither ascospores nor ballistospores could be found. The organism was cream colored and somewhat slimy in appearance, but a starchlike compound (characteristic of species in the genus *Cryptococcus*) was not formed.

¹ Supported by a fellowship of the Calouste Gulbenkian Foundation, Lisbon, Portugal.

The organism appeared to belong to the genus *Torulopsis* or to *Candida*. Since the formation of pseudomycelium on potato glucose agar slides (Lodder and Kreger-Van Rij, *The yeasts*, North Holland Publishing Co., Amsterdam, 1952) was not decisive and characteristic, the experiment was repeated with corn meal agar, prepared as described by Skinner (Bacteriol. Rev. **11**:227, 1947). To our surprise the growth on corn meal agar slides showed the formation of asymmetric ballistospores (genus *Sporobolomyces*). When the yeast was inoculated in petri dishes containing malt agar (5%), potato glucose agar, or corn meal agar, and the dishes were inverted over malt agar, only the culture grown on corn meal agar discharged ballistospores (which formed colonies on the malt agar below). When the colonies growing on malt agar were inverted over another plate of malt agar, no spore discharge occurred.

Subsequently, another culture was isolated, and was initially classified as a species of *Torulopsis*; it produced small numbers of symmetrically shaped ballistospores when grown on corn meal agar. In addition, we had in our collection several strains of *Bullera alba* which appeared to have lost the ability to produce ballistospores when tested by the standard method. On corn meal agar, however, ballistospore discharge could be detected without difficulty. This

included Hanna's strain of *B. alba*, which Lodder and Kreger-van Rij had also found to be asporogenous.

The recommended procedure is as follows: 10 ml of corn meal agar are poured into a petri dish and inoculated with the test organism, along two diameters at square angles. The dish is inverted over another petri dish bottom containing 5%

malt agar on which is placed a sterile slide. One of the lines of inoculation is positioned over the slide, and the two dishes are taped together along the entire circumference. A piece of moistened sterile cotton may be placed inside to raise the humidity. Incubation is best at 18 to 20 C, since some strains sporulate poorly or not at all at temperatures above 25 C.

ERRATUM

SIALIC ACIDS (*N*,7-O-DIACETYLNEURAMINIC ACID AND *N*-ACETYLNEURAMINIC ACID) IN *ESCHERICHIA COLI*

I. ISOLATION AND IDENTIFICATION

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Volume 82, no. 6, page 838, col. 1, footnotes: the correct Present Address for Charles W. DeWitt is Depts. of Surgery and Microbiology, Tulane University, School of Medicine, New Orleans, La., and the correct Present Address for Janet A. Rowe is Dept. of Bacteriology, University of Illinois, Urbana, Ill.