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A SIMPLE METHOD FOR MAKING MULTIPLE TESTS OF A MICROORGANISM

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In applying different biochemical reactions to microorganisms, considerable time and expense can be saved by the following method, which makes it possible to make at least 16 tests on a single plate of either the primary growth or a transplant of it.

Press sterile glass tubes, 10 mm long and 9 mm O.D., aseptically about 1 mm into the surface of a plate of the selected culture medium, put one or two drops of the appropriately diluted reagents into the resulting cups, and observe any changes.

The method is capable of numerous applications. For example, in determining reactions of staphylococci, the 48 hour growth on staphylococcus medium no. 110 (J. Bact., **51**, 409, 1946) is "cupped," one or two drops of 1:10 of the "indicator" dilution of either chlorphenol red, bromcresol purple, bromthymol blue, or phenol red are added to determine fermentation of mannitol. Reduction can be determined by using triphenyl tetrazolium chloride and observing reduction in about 5 minutes. Gelatinolysis can be determined by putting 20 per cent sulfosalicylic acid into a 22 mm O.D. "cup" around an isolated colony.

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