

Microbiology

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CONCLUSIONS

1. Excessive variability was observed by collaborators during comparative testing of Lin's wild yeast medium (1) and Longley's modified medium (2) for wild yeast.
2. Some of the steps involved in the test procedure were awkward and may have resulted in differences in the size and number of yeast colonies on replicate culture dishes, not only between, but within laboratories.

RECOMMENDATIONS

1. Discuss modifications of the procedures during the closed subcommittee meeting in May, 1982, for the purpose of better controlling variations in data.
2. Repeat the collaborative testing of the two media during 1982-1983.

PROCEDURE

Four wild *Saccharomyces* yeast cultures were provided by the chairman. All solutions and culture media were to be prepared by the collaborators according to the specifications described by the

authors cited below. The specific instructions included: preparation of four yeast cell mixtures consisting of one each of the four test organisms and a "house" brewer's yeast; dilution of the cell suspensions to provide 500-1,000 cells per milliliter for plating; plating each mixture on the two test media in triplicate and incubating at 28°C for four days; and counting and estimating the colony number and size and comparing results observed on both media.

RESULTS AND DISCUSSION

Lin's wild yeast differential medium (LWYM) is included in the current ASBC "Methods of Analysis" (1975) as MICROBIOLOGICAL CONTROL-5, E. A modification of this medium was published by Longley in 1980 to improve selectivity for wild *Saccharomyces* species. The current collaborative testing was designed to compare the growth response of the four different *Saccharomyces* species known to occur in the brewing environment on both media.

In addition to the variability observed, the collaborators reported several difficulties or problems: the media were difficult to prepare, especially on a routine basis; modified LWYM plates were wet after incubating anaerobically; and Et80 (ergosterol, Tween 80, ethanol) solution was difficult to prepare.

Based on collaborators' comments, more background work is needed before repeating the study.

LITERATURE CITED

1. Lin, Y., *Am. Soc. Brew. Chem., Proc.* 1974, p. 69.
2. Longley, R. P., Edwards, G. R., and Mathews, S. A. *J. Am. Soc. Brew. Chem.* 38:18, 1980.