

1933

Some Notes on the Voges-Proskauer Reaction

S. S. Epstein
Iowa State College

Max Levine
Iowa State College

Copyright ©1933 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Epstein, S. S. and Levine, Max (1933) "Some Notes on the Voges-Proskauer Reaction," *Proceedings of the Iowa Academy of Science*, 40(1), 80-80.

Available at: <https://scholarworks.uni.edu/pias/vol40/iss1/23>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

A NEW RESERVATION AREA IN IOWA

E. J. PETRY

Adjoining the city of McGregor on the west, an area of about twenty acres, called the Iowa Memorial Arboretum is projected. This is to be restocked, where needed, with native species, and certain hardy exotics are also to be introduced. Other attractions, including a museum, are projected.

DEPARTMENT OF BOTANY,
COE COLLEGE,
CEDAR RAPIDS, IOWA.

SOME NOTES ON THE VOGES-PROSKAUER
REACTION

S. S. EPSTEIN AND MAX LEVINE

The formation of acetyl-methyl-carbinol by members of the genus *Aerobacter* was detected in six-hour cultures. The procedure involved the heavy inoculation of young agar slant cultures into approximately three cc. Difco M.R.-V.P. medium, incubation at 30° C. for six hours and using 0.3 per cent creatine in 40 per cent KOH as the test reagent. Seventy per cent of 202 cultures tested produced positive results within one hour after the addition of the test reagent and over ninety-nine per cent within four hours. The creatine KOH solution was satisfactorily effective for three weeks when kept at ordinary laboratory conditions and for six weeks when stored at ice-box temperatures.

In comparing various modifications with the standard procedure for testing for the V. P. reaction it was found: (1) In instances where organisms produced strong and rapid reactions there was little evidence of any advantage of the various modifications over the "Standard Method," and (2) in instances where the reaction was weak when using 10 per cent KOH, some of the special test reagents were of material influence in accelerating the color reaction. Among these are the use of creatine (O'Meara, 1931), FeCl₃ (Werkman, 1930) and copper-ammonical NaOH solution (Leifson, 1932). The use of creatine with 40 per cent KOH gave the best results.

DEPARTMENT OF BACTERIOLOGY,
IOWA STATE COLLEGE,
AMES, IOWA.