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Culturing Bovine Tubercle Bacilli.

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The studies on culturing tubercle bacilli reported by Sweany and Evanoff[1, 2] have been applied to material from tuberculous bovine lymph nodes. Seventeen specimens were treated in various ways and inoculated on 3 types of media: the cream-egg; the milk-egg, and glycerine potato medium of Corper. The material was macerated in salt solution and inoculated directly; treated with 3% sodium hydroxide; 3% hydrochloric acid; and 6% and 12% sulphuric acid respectively.

All specimens grew directly on the cream medium, but none grew on media containing fresh glycerine. This was observed years ago by Park[3] and others. One specimen grew well by direct inoculation but scarcely at all after treatment. Strains vary greatly in their resistance to caustics. The more saprophytic strains appear to be less able to resist the effects of caustics.

The percentage growth following the use of various caustics is as follows: Of those treated with 3% HCl 89% of the tubes were positive; with 3% NaOH, 83.2% were positive; with 6% H_2SO_4, 78.7% were positive, and with 12% H_2SO_4 71.6% were positive. There was no serious contamination.

The direct smears grew 4 times out of 17.

Summary: 1. A direct culture method is described for obtaining growth and identifying tubercle bacilli from bovine material. 2. The bovine organisms isolated grow directly on cream-egg-milk medium, but not on glycerine-egg-milk medium. 3. Direct inoculation and treatment with 3% HCl and 3% NaOH are recommended for more complete results.

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[1] Sweany and Evanoff, *Am. Rev. Tuber.*, 1928, xvii, 47.

[2] Sweany and Evanoff, *Am. Rev. Tuber.*, 1928, xviii, 661.

[3] Park and Krumweide, Dept. of Health, N. Y. City, 1916.