

Abstract:

Tyler LaPolla

Senior Biomedical Science Major from Honolulu, HI

Research Performed under Dr. Thomas Benoit

Isolation of Gordon Group 1B *Bacillus spp.* with an Ammonium-Based Agar

The genus *Bacillus* represents a large group of rod shaped Gram positive bacteria with the ability to make dormant endospores during periods of starvation. *Bacillus subtilis* is a well-known bacterium with industrial value due to its widespread use in agriculture, antibiotic development, and antigen development for vaccines. A novel medium with ammonium as the sole nitrogen source was developed and investigated for its effectiveness in the preferential isolation of Group 1B *Bacillus spp.* Through the observations of mannitol fermentation and spore characteristics, it was determined that Group 1B *Bacillus spp.* can be selectively isolated on an ammonium based agar.