

## Microbiology Lab Experiment Changes

**Experiment #:** 3-9

**Title:** Endospore Stain

**Live Organisms:** *Bacillus subtilis* or *Bacillus cereus*, soil plates

**Changes:**

**Modified procedure:**

Put heat fixed smear onto “staining hot plate”.

Use tongs to place a sponge saturated with stain onto the smear.

Allow stain to sit approximately 5 minutes.

Make a slide from one of the soil plates.

Observe and draw *Clostridium tetani* slide demo

**Note:** this slide is not stained with malachite green.

Malachite green fades in the mounting medium of a prepared slide. Most commercially prepared spore stain slides are stained with carbol fuchsin.

**Take Home Lesson:** You need to know the reagents and their function in the staining procedure. Why do we use the endospore stain? For what organisms do you expect to find spores? Be able to recognize that an organism has produced endospores based on its appearance under the microscope. Note that spores can be internal (endospores) or external (free spores) relative to the organism. Be careful not to mistake free spores for cocci.