

Negative stain



By
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Negative Staining



➤ Bacterial cells are **unstained** against stained background.

➤ **Using:**

✓ **Acidic stain (ex: Nigrosin) >>>** has -ve charge that repelled by -ve charge of bacterial cell.

➤ **Advantages of negative staining:**

✓ **No heat fixation ???????**

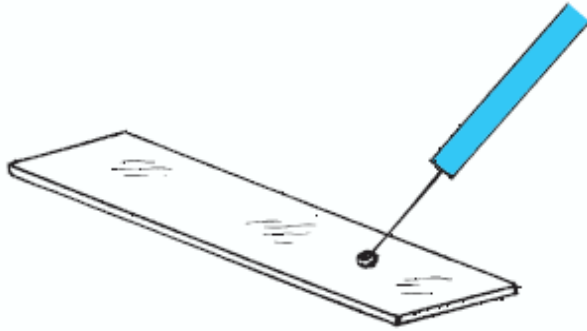
✓ **No destruction of cells.**

✓ **Study the morphology , arrangement & actual size of cells.**

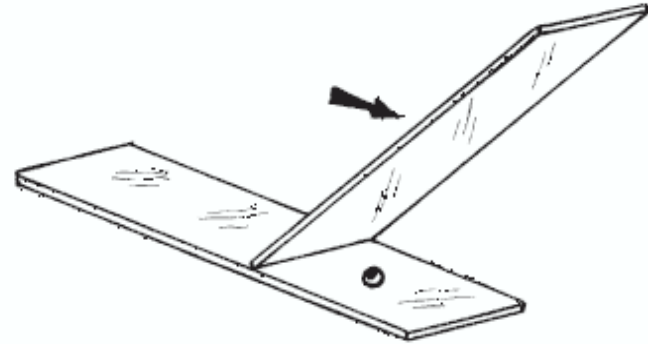
✓ **Stain cells that are too delicate to be heat fixed.**



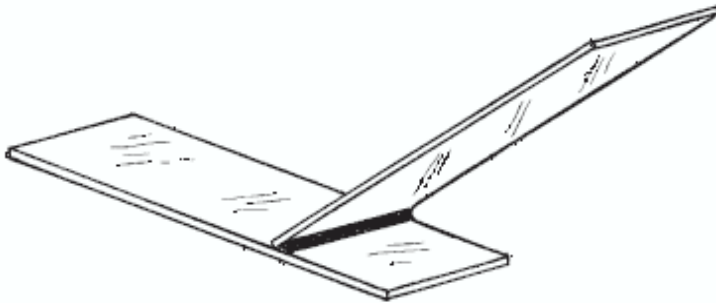
Negative Staining



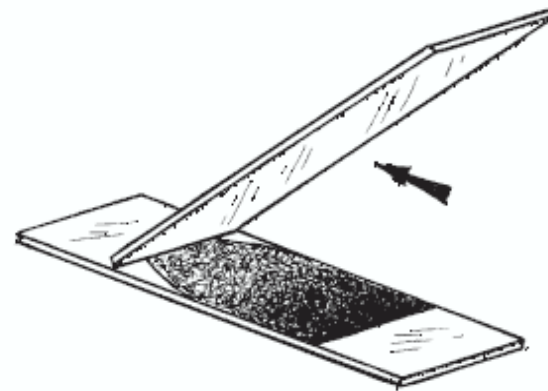
1 Organisms are dispersed into a small drop of nigrosine or India ink. Drop should not exceed 1/8" diameter and should be near one end of the slide.



2 Spreader slide is moved toward drop of suspension until it contacts the drop causing the liquid to be spread along its spreading edge.



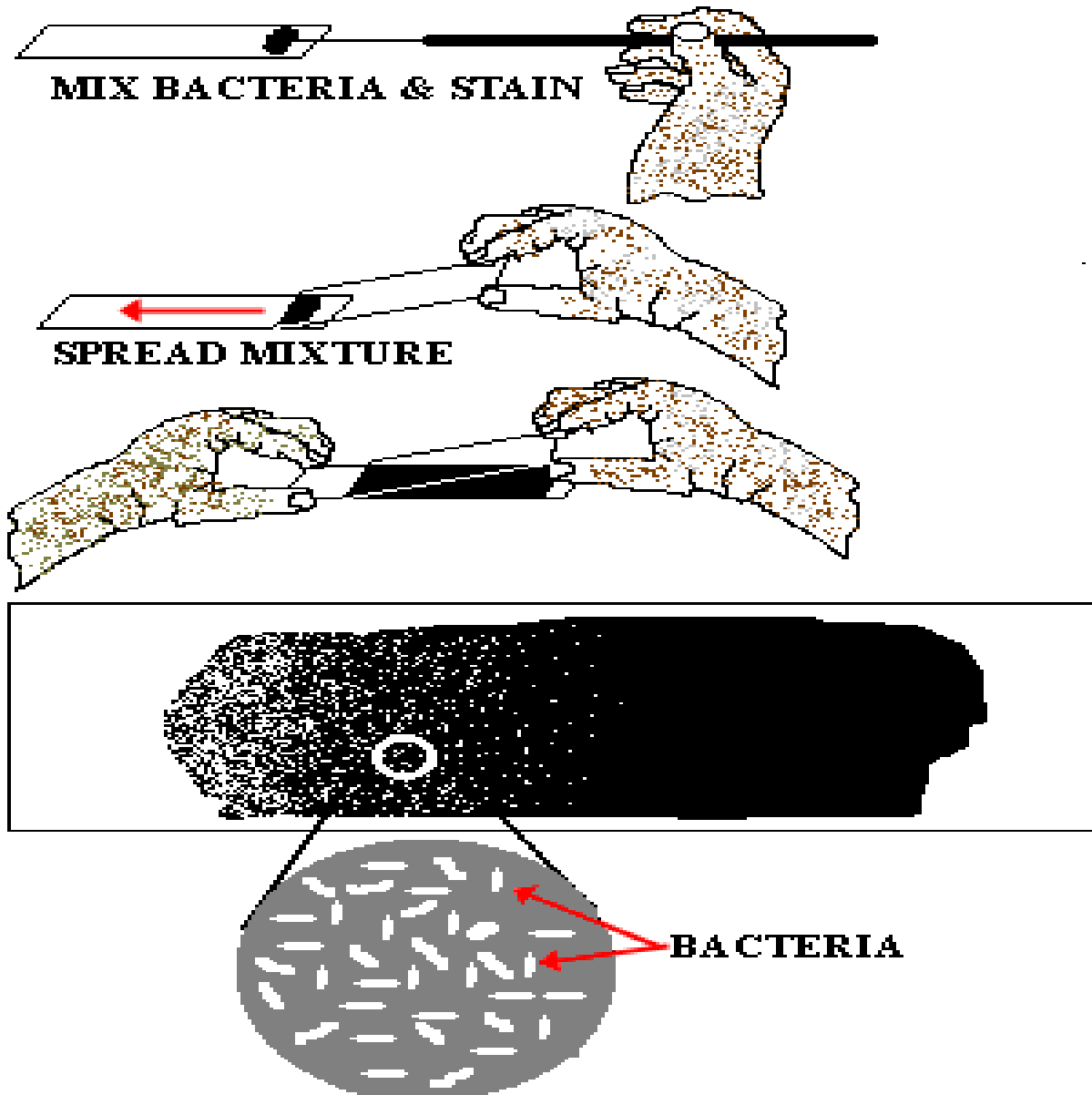
3 Once the spreader slide contacts the drop on the bottom slide, the suspension will spread out along the spreading edge as shown.



4 Spreader slide is pushed to the left, dragging the suspension over the bottom slide. After the slide has air-dried, it may be examined under oil immersion.



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Results



Negative Staining



Name : Staphylococcus aureus

Shape: Spherical

Arrangement: Bunch (grape like)

Color : Clearly visible against dark background.





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Name: Bacillus subtilis

Shape: Long rods

Arrangement : Chain

Color : Clearly visible against dark background





Negative Staining

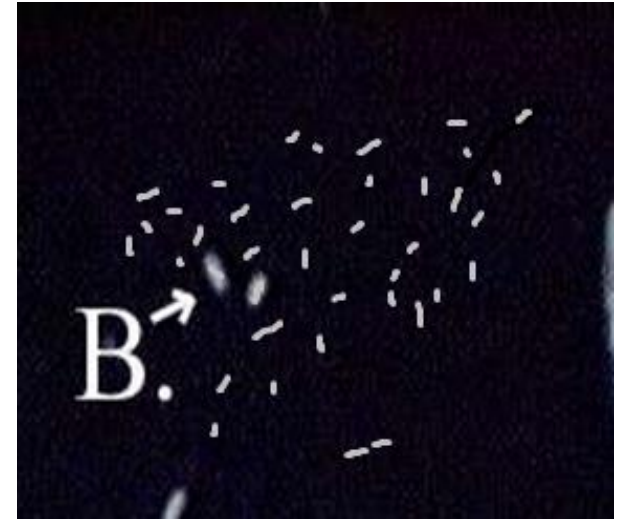


Name : Escherichia coli

Shape: Short rods

Arrangement : Single scattered

Color : Clearly visible against dark background





**GOOD LUCK
&
SEE YOU NEXT LAB**