

B. Pestis is the casual agent in Bubonic Plague, a disease characterized by haemorrhagic septicaemia. The lymph glands, or lungs, may be involved.

A slender, oval rod, about 1.5^{μ} in length, by 0.5^{μ} in width, showing bi-polar staining.

Gram negative, and non-motile.

It grows well on ordinary media, forming, at first, fine dew-drop colonies, which soon become large, greyish and confluent.

There is no gas production in glucose or lactose bouillon.

Litmus Milk is changed to a lilac color.

In the diagnosis of Bubonic Plague a small amount of suspected material is injected into the root of the tail of a mouse, or rubbed into the skin of a guinea-pig. Death, as a rule, ensues after a short time, and characteristic lesions are seen. *B. Pestis* can be demonstrated in film preparations made from these lesions.

4. *Phagocytosis*: For the study of *Phagocytosis* stained film preparations will be given out.

These preparations will show many leucocytes containing bacilli. They are to be studied with the oil-immersion lens, and drawings illustrating the active stage of phagocytosis, are to be made in the books.

The mechanism of phagocytosis is complex and consists of several stages.

It is one of the most important protective agencies preventing the development of infectious diseases.