

Practical 12 Hands out

BACTERIAL CULTURAL CHARACTERISTICS

Cultural characteristic of bacteria is one of the important aspect applied in identification of bacteria. Cultural characteristics describe various features of growth of bacteria on medium.

Growth on solid media

Size - in mm

Shape - Round, irregular, rhizoid, spindle Elevation - Flat, raised, convex, umbonate

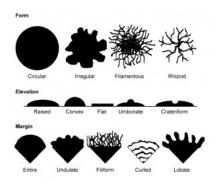
Surface - Smooth, rough, papillate, ringed, fried egg, medusa head

Margins - Entire, wavy, lobate, erose, curled, filamentous

Opacity - Opaque, translucent, transparent

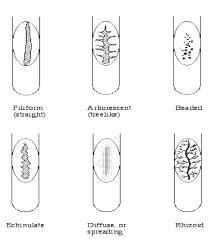
Consistancy - Butyrous, friable, viscid

Emulsifiability - Easy, difficult, forms homogenous or granular suspension.



Growth on slant

Amount - Scanty, moderate, abundant Form - Spreading, filiform, rhizoid



Growth in stab

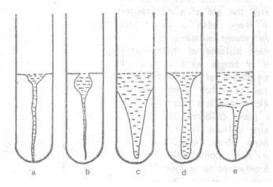
Amount - Scanty, moderate, abundant

Form - Papillate, filiform, beaded, arborescent

Surface growth - Absent, present, colouration

Liquification - forming layer, like cup, like turnip, like funnel, tubular





Gelatin stab cultures: a.crateriform; b.napiform; c.infundibuliform; d. snatiform

Growth in liquid media

Amount - Scanty, moderate, abundant

Surface growth - Absent, present, ring, pellicle (thin, thick, smooth, granular)
Deposit -Absent, present(slight, moderate, abundant, powdery, viscid)

Turbidity - Absent, present Odour - Absent, present

Exercise

1. Describe the colony characteristics of *Escherichia coli* on MacConkey's agar medium.

2. Describe cultural characters of *Staphylococcus aureus* in Nutrient Broth.
