

CHAPTER - 11

BIOTECHNOLOGY

- PRINCIPLES AND PROCESS

Process of Recombinant DNA technology:

Steps of r – DNA,

- 1) Isolation of DNA
- 2) Cutting DNA at specific locations
- 3) Amplification of gene of interest using PCR
- 4) Insertion of r – DNA into host

Isolation of genetic material (DNA):

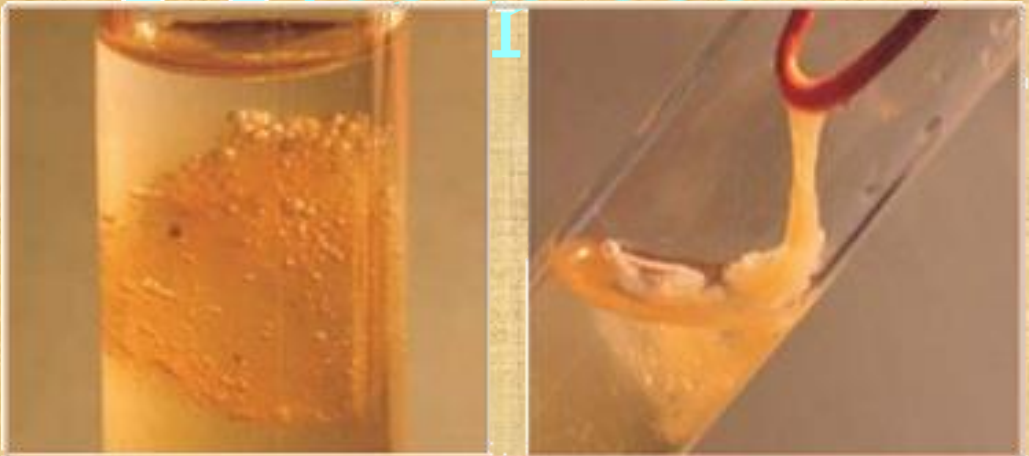


Fig. DNA that separates out can be removed by spooling

I) Removal of cell wall:

Cellulose for plants,

Chitinase for Fungus,

Lysozyme for Bacteria

For animals no enzyme is required.

II) Inactivation of protein and RNA:

Protease – For proteins

RNAase – For RNA

- Chilled ethanol – DNA is PPT out
- Spooling

