

ASEXUAL REPRODUCTION IN CYANOBACTERIA

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- Cyanobacteria reproduce asexually, either by means of binary or multiple fission in unicellular and colonial forms or by fragmentation and spore formation in filamentous species. Under favourable conditions, cyanobacteria can reproduce at explosive rates, forming dense concentrations called blooms.
 1. By Hormogospores
 2. By Akinetes
 3. By Endospores
 4. By Exospores

BY HORMOGONES

- All filamentous cyanobacteria reproduce
- by fragmentation of their filaments
- (trichomes) at more or less regular
- intervals to form short pieces each
- consisting of 5-15 cells.
- These short pieces of filaments are
- called hormogonia.
- The latter show gliding and
- develop into new full- fledged filaments.

BY AKINETES

- ◉ Most filamentous cyanobacteria develop
- ◉ perennating structures (dormant structures) in
- ◉ adverse condition. These structures are larger than
- ◉ the vegetative cells, are equipped with thick walls,
- ◉ and are called akinetes (Fig.). When favourable
- ◉ conditions return, they germinate and produce
- ◉ new filaments.

BY ENDOSPORES

- Some cyanobacteria develop endospores. The protoplast of certain cells divides and develops endospores. The old cell wall bursts and endospores come out.

BY EXOSPORES

- They are cut out at the tip of some branches. They get separated and develop new filament.

