

# Asexual Reproduction in Algae.

Occur individually. There is no union, fusion, involvement of two different, gamete, filament, thallus or cell or nuclei. Only proplasm of an individual is involved. There may be some specialized structures including spores as -

- (i) Zoospores: ~~In~~ Some of older cells of the filaments are involved. Their cytoplasm divide and form zoospores during favourable condition. They are motile hence named. They may be
- a) Biflagellate - e.g. Chlamydomonas sps.
  - b) Tetraflagellate - e.g. Ulothrix sps. Cladophora sps.
  - Multiflagellate / - c) Stephanokontean - e.g. Oedogoniales.
  - d) Compound - e.g. Vaucheria sps.

(ii) Aplanospores: They lack motility. They are like zoospores surrounded by a wall. They develop in unfavourable condition. e.g. Ulothrix sps.

(iii) Hypnosporos: The wall surrounding spore is quite thick. Thicker than aplanospores. Produced during adverse condition e.g. Pediastrum sps.; Vaucheria sps. Chlamydomonas nivalis.

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ii) Microspores: These spores are minute. e.g. Bacillariophyceae.

v) Autospores: They are similar to mother cell. (in shape not in size). They are like aplanospores. Each of them may give rise to a new plant in favourable condition.

vi) Auxospores: Found in member of Bacillariophyceae.

vii) Endospores: They are formed within the cell hence named.

viii) Carpospores: Produced in Carposporophyte of Rhodophyceae.

ix) Monospores: They develop within an specialized structure known as Monosporangia e.g. Porphyra sps. Porphyridium sps. Bangia etc.

x) Neutral Spores: They are not produced in sporangia. e.g. Rhodophyceae.

xi) Paraspores: Found in the members of Rhodophyceae.

xii) Stratospores: They are mainly perennating bodies e.g. members of Bacillariophyceae & Xanthophyceae.

xiii) Tetraspores: Non-motile spores formed in tetrasporangia in tetrasporophytic plants.

xiv) Palmella stage: In some of the cases the newly formed bodies/cells have gelatine cover in a thick mucillagenous envelope. e.g.  
Chlamydomonas sps.  
Ulothrix sps.

xvi) Daughter colonies: The colonial species develop new colonies within them. On separation they form new colonies. e.g. Hydrodictyon sps. Pediastrum sps. ; Volvox sps.

xvii) Gongrosira stage: The protoplast of the mother one divides into several parts. These parts of protoplast may develop into hypospores or cysts are produced. They look like an algae known as Gongrosira. Hence named.

xviii) Akinetes: These are thick walled non-motile spores, formed during unfavourable condition. These may tide over the unfavourable condition. On coming of favourable condition they may give rise to new plant body. e.g. Anabaena sps.

xiv) Azygospores: They are formed from zygotes which are formed without fusion i.e. from a single individual. e.g. Oedogonium sps. Spirogyra sps.