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CORE CONCEPT OF PTERIDOPHYTE

The chief modes of vegetative reproduction found among pteridophytes: vegetative reproduction takes place by a variety of ways.

1. By Fragmentation: In among all plants, vegetative reproduction method is the simplest type. In this method body of plants damaged by accidentally into two parts and after than each part become (continues its growth independently and forms a new thallus.

2. By death and decay of the older parts: As soon as the progressive decay of the thallus reaches a dichotomy, the individual branches become isolated and each branch continues its growth and forms a new thallus. This is an example of connection of death with reproduction and is common in thalloid. ex - Lycopodium species.

3. By Gemmae: A third prolific

2.

specialized method of vegetative reproduction is by characteristic special asexual reproductive bodies known as gammae. They are produced in large numbers in long succession in small gamma cups. These cups have colourless fringed margins and are about one eighth of an inch in diameter. The gamma cups in the beginning appear as circular areas, a short distance behind the apical cell but on account of the upward growth of the adjoining vegetative tissue they soon become hollow cavities.

4 By vegetative buds; some pteridophyte — *Lycopodium inundatum* shows only apical tip is present and rest rhizomes are abolished in unfavourable condition. In case of favourable condition these tips behaves just like resting buds and after than they germinate and gives a new plant. In *L. phlegmaria* and *L. phyllanthus* forms leafy bulbous buds.

(5) By Tubers: Exogenous gammae have been found on the rhizoids of over 100 moss species. The fact that rhizoidal gamma

- are buried and may function as survival (akin to the tubers in various flowering plants) has led to these gammae also being called tubers. No liverwort or hornwort produces thizoidal gammae. Tubers is most important method of vegetative reproduction. In unfavourable condition tubers store reserve food material.
6. By bulbils: some pteridophytes bulbils produces on the roots and leaves. When they separated they gives a new plant.
- Ex - *Selaginella* sp, *L. cernuum*, *L. ramulosum* etc.