

Ques Describe the life history of Pezizia

Classification →

Proposed by A. Ainsworth:
Class → Discomycetes
order → Pezizales
Family → Pezizaceae
Genus → Pezizia
Species → More than 100

It is a sporophytic fungi found during rainy seasons on the ground of decaying (गट्टा टा टूट) wood and richly manured (खाद) soils and also found on barren (अनकमजाऊ) grassland. It is also known as cup fungi because its fruiting body apothecia are appeared as cup shaped structure.

VEGETATIVE STRUCTURE →

The somatic mycelium is branched, septate, multinucleated forming dense mat on the surface. The mycelium is not visible from outside.

REPRODUCTION \rightarrow It reproduced by asexual and sexual methods.

ASEXUAL REPRODUCTION \rightarrow It is a very uncommon methods in which conidia and chlamydospores are developed. The thin walled conidia are developed on the erect hyphae known as conidiophore. Each conidia germinate and to produce new mycelium. In few species thick walled chlamydospores are developed at intercalary position. After germination they produce new mycelium.

SEXUAL REPRODUCTION \rightarrow Typical sexual organs like antheridia and ascogonia are not found. Thus sexual process consisting autogamy process that is fusion of two ^{different} vegetative hyphae.

In this process by the fusion of two vegetative hyphae, two nuclei

come in pair, which is called dicarriome. This dicarriome cells produced ascogenous hyphae which are multicellular and binucleate. The terminal cell of this hyphae functions as ascus mother cell. Both nucleus of mother cell fused to form diploid nucleus. Now this diploid nucleus under goes meiosis then mitosis to produce 8 haploid nuclei. Each nucleus change into uninucleate ascospores. The ascus are cylindrical, erect and found side by side with mixed with paraphysis. The complete structure become surrounded by vegetative hyphae to form a cup shaped fruiting body called apothecium.



←: *ascogenous hyphae*

ASCOCARP : → The mature fruiting bodies of pezizoa is called apothecia which is cup shaped structure. It has cup shaped disc and short stipe but some time stipes are absent. The diameter of disc is 1-12 cm and colour is may be orange, bright red or grey or yellow. The apothecia consist three parts

i) Hymenium : → The fertile layer of cavity is called Hymenium. It consist of erect ascus and sterile paraphysis. The ascus contains four or eight ascospore. The paraphysis is coloured due to pigmented oil droplets.

Ascospores are thin walled unicellular, uninucleate and oval structure.

ii) Subhymenium : → Just below the Hymenium thin layer of hyphae is present, which is called Subhymenium or Hypothecium.

sium.

EXCIPIULUM → The basal part of ascocarp is called excipulum. After maturity the ascus open from apical part and ascospores comes out which germinate into new plant. Mycelium



