

Dr. UMESH KUMAR

DEPARTMENT OF BOTANY

**U.R. COLLEGE ROSERA
(SAMASTIPUR)**

B.Sc. PART- I
(BOTANY SUBSIDIARY).
[GROUP- A]

(i) REPRODUCTION OF PEZIZA.

Group - A.

U.R. College, Raigarh

Reproduction of Peziza

The reproduction in Peziza takes place by following two methods -

(A) Asexual method → The asexual reproduction is not common in species of Peziza. However in some species like *P. vesiculosa* and *P. recondita* it occurs by means of conidia or chlamydospores. The conidia are produced terminally by erect and branched conidiophores. The conidia are thick walled spores produced singly or in groups within the cell of mycelium. They germinate to produce new mycelia in favourable condition.

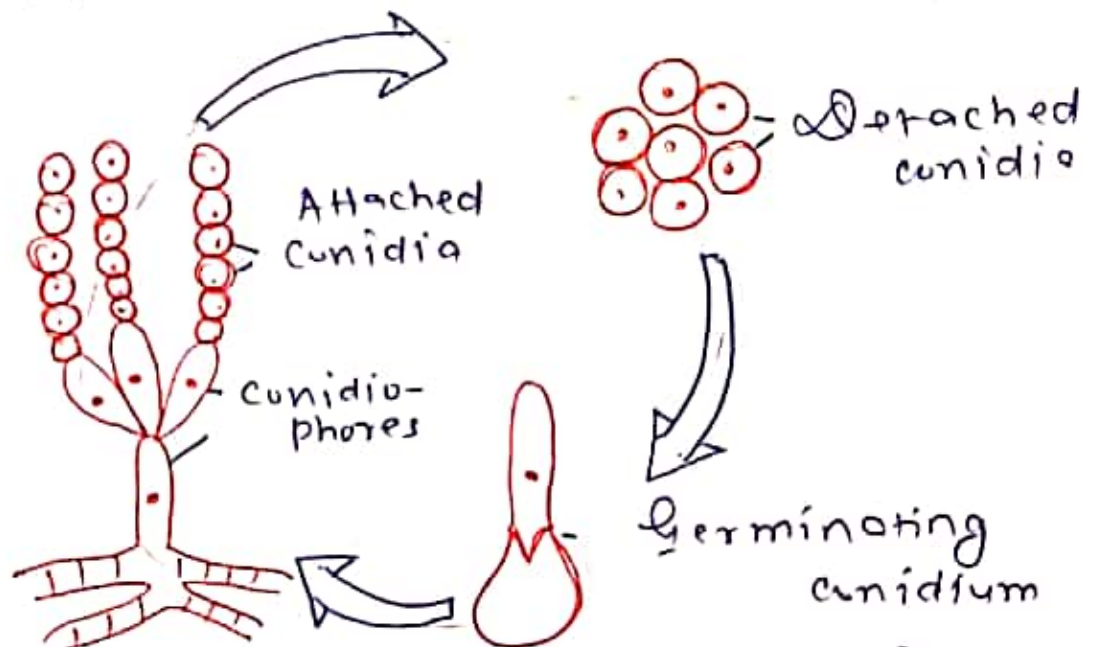


Figure - Conidia formation in Peziza.

⑤ Sexual Reproduction → The sexual^② reproduction in Periza is very simple. The sex organs are not formed. The apothecium is formed as a result of the fusion of two vegetative nuclei within a vegetative cell. Two vegetative cells in a mass of hyphae copulate each other. The nucleus of one cell passes to other and thus a dikaryon is formed. This dikaryotic cell produces a number of ascogenous hyphae showing hook at the tip. The ascogenous hyphae become many celled due to septation. All cells are binucleate. The terminal or sub-terminal (penultimate) cell of ascogenous hypha functions as ascus mother cell. The two nuclei of ascus mother cell fuse together to form a dikaryon. The ascus mother cell develops into the ascus and dikaryon divides three times. The first division being meiotic forming 8 ascospores. In this way a large number of asci are formed. The asci grow erect parallel to each other intermingled with sterile paraphyses.

Each ascus is an elongated cylindrical structure consisting of eight ellipsoidal ascospores arranged

obliquely in row. The ascospores ③ are liberated through the terminal pore of ascus in humid condition. They germinate in favourable condition and produce new mycelia.

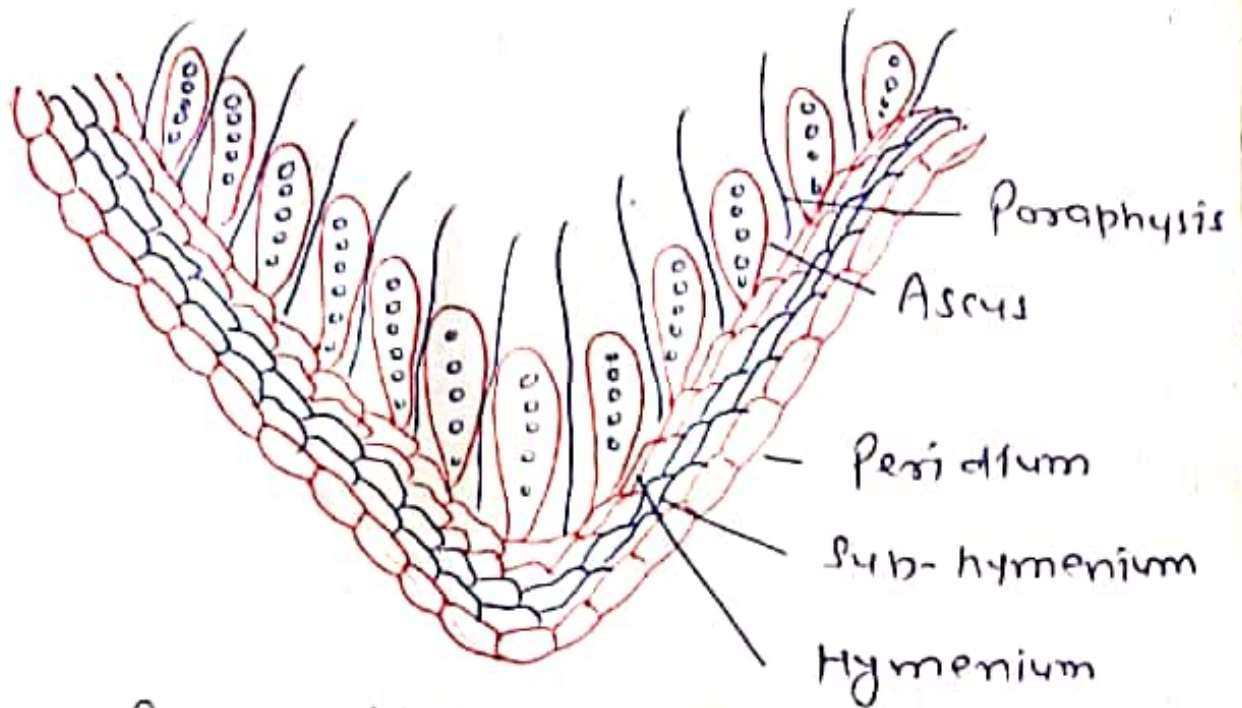


Figure - V.S. of Apothecium of Peziza.

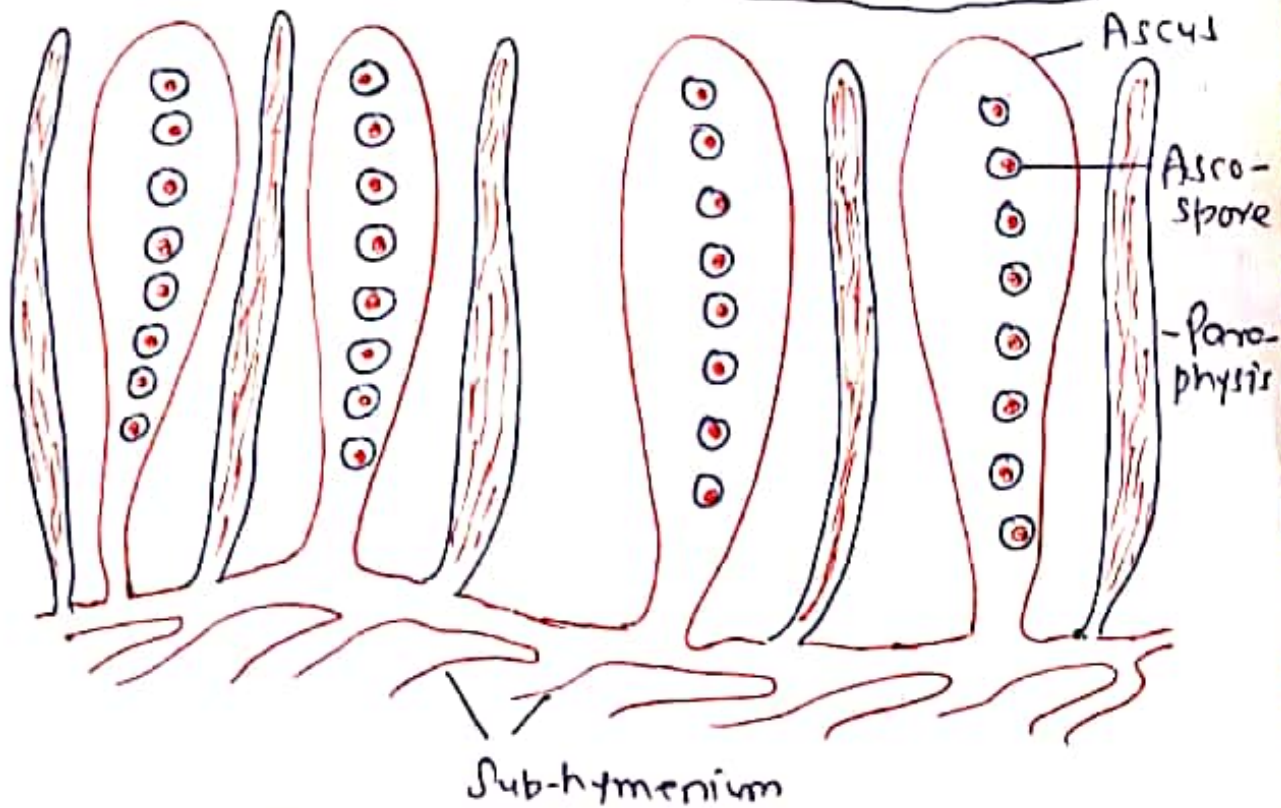


Figure → Part of Apothecium with asci and ascospores.