

## Class 1: Taphrinomycetes

### Order: Taphrinales

This order includes a variety of fungus, all parasitic fungi on vascular plants, causing an increase in the growth of infected tissues. The disease symptoms appear on infected plants such as wrap leaves, which affects leaves of trees peach and almond, this order includes two families.

#### Family 1: Taphrinaceae

This family includes about 118 species of Genus *Taphrina* sp. which grow as yeasts by budding during one phase of their life cycles, then infect plant tissues in which typical hyphae are formed this condition called **Dimorphic**.

*Taphrina deformans* is one of the most important fungi of this family, which causes Peach Leaf Curl disease. Figure (1)

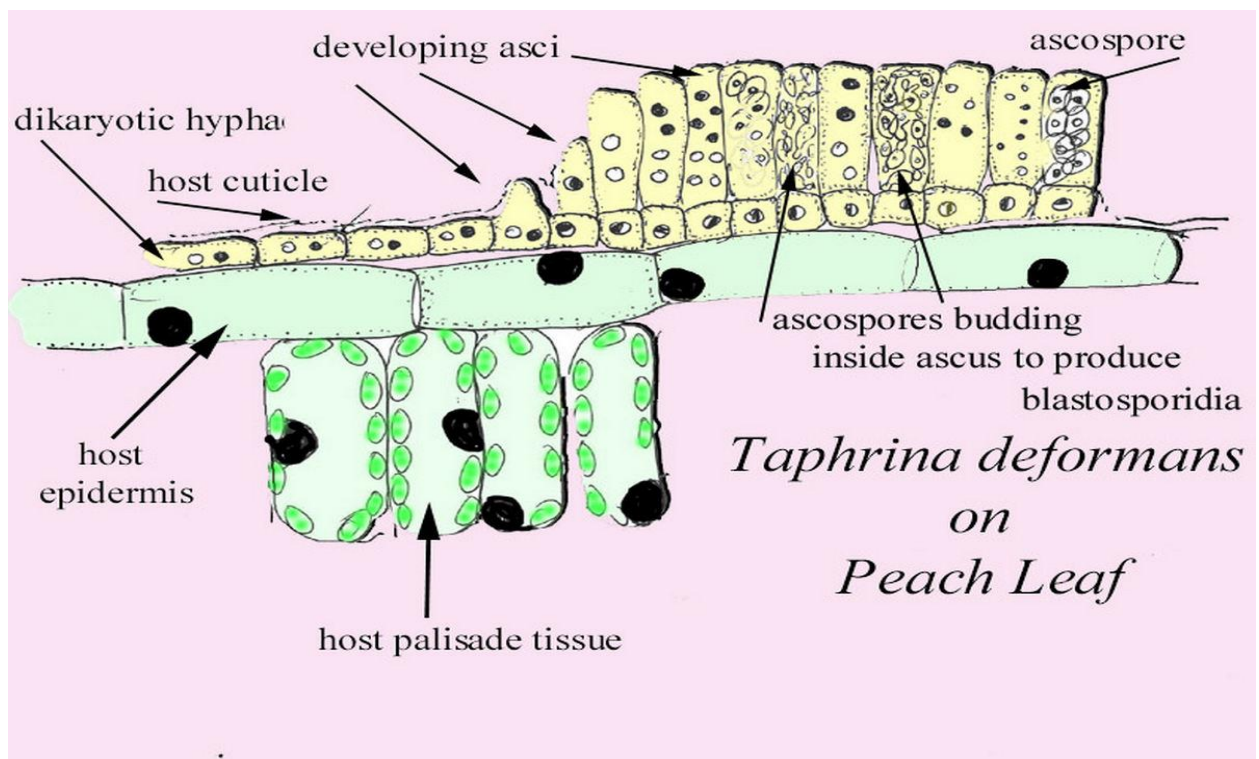


Figure (1) *Taphrina deformans*

### Family 2: Protomyctaceae

The most important species of this family is the fungus *Protomyces macrospores*, which causes **life gall disease** (Figure 2) of a group of plants belonging to the Umbelliferae family such as, celery, carrots and coriander.



Figure (2) *Protomyces macrospores* caused life gall disease of coriander

### Class 2: Schizosaccharomycetes

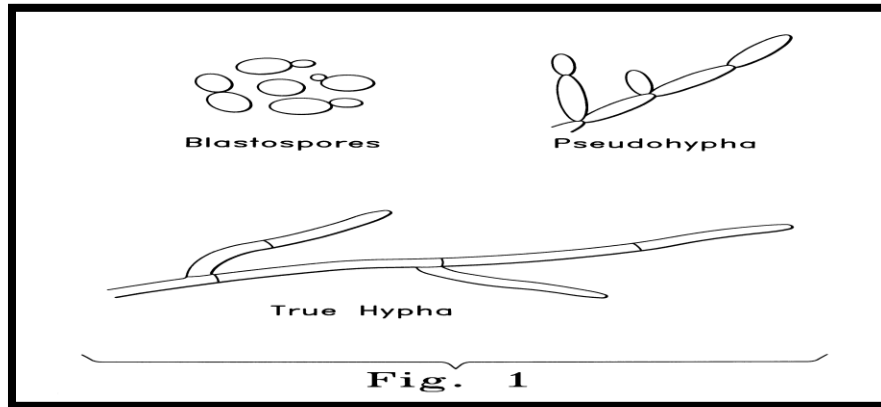
#### Order : Schizosaccharomycetales

#### Family : Schizosaccharomycetaceae

#### Ex : *Schizosaccharomyces* sp.

is a genus of fission yeasts. The most well-studied species is *S. pombe*, at present four *Schizosaccharomyces* species have been described (*S. pombe*, *S. japonicus*, *S. octosporus* and *S. cryophilus*). is a significant model organism in the study of eukaryotic cell biology. This yeast has contributed to the knowledge of many genetic information that has been reported in reaching a cure for many diseases, especially cancer, yeasts reproduce by budding or forming spores called **blastospores**.

Sometimes the bud is not separated from the mother forming **pseudohypha** which is a chain of linked buds (Figure 3).



**Figure (3) Blastospores**

**Ex: *Pneumocystis* sp.**

is not commonly found in the lungs of healthy people, but, being a source of opportunistic infection, it can cause a lung infection in people with a weak immune system. *Pneumocystis pneumonia* is especially seen in people with cancer undergoing chemotherapy.

### **Class 3: Pezizomycetes**

#### **Order: Pezizales**

This order consists of a group of fungi whose fruit bodies are Disc shape or Apothecium, which are open from the beginning or closed from the beginning and then open later. The fruiting body is relatively large, sometimes up to 10-15 cm in size, bright colors and fruiting body use to eat.

**Ex: *Peziza* sp.**

is a large genus of saprophytic cup fungi that grow on the ground, rotting wood, or dung. Most members of this genus are of unknown edibility and are difficult to identify as separate species without use of microscopy. The genus has been estimated to contain over 100 species.



Figure (4) *Peziza* sp. Disc shape