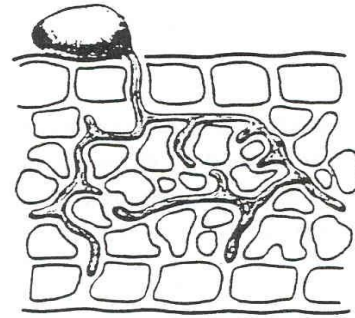
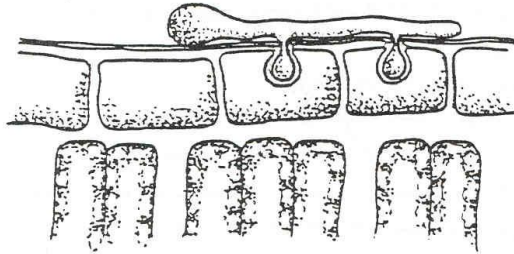


- Humans (clothes),
- Tools and equipment.

Some fungi remain on the outside of the host plant (ectoparasite). From their mycelium they penetrate the outer skin with short hyphae extracting nutrients from the cells (real mildew).



*Image. 15: Superficial hyphae growth on real mildew    Image. 16: intercellular growth of parasitizing fungi*

The most parasitic fungi are endo-parasitic, they grow between the plant cells. From their hyphae they damage the plant tissue by causing damage to the structure. The fungi use enzymes that split the cell walls upon penetration of the plant tissue. Proteins, fats and carbohydrates are degraded and use as food by the fungi.

Some fungi produce toxic substances (toxins). The released toxins damage and kill cells; they can also release hormones. These hormones disrupt the growth of the host plant, causing symptoms like tumours, witch's broom and adventive root growth.

Some fungi (vascular parasites) appear in the transport tissue, mainly in the tracheal system. Clogging of the vascular tissue not only occurs as a result of internal mycelium growth, but also as a result of the reaction of the xylem tissue of the host plant.

Harmful effects of fungal infections:

- Dying of tissue (necrosis),
- Reduced growth,
- Deformations,
- Wilting
- Dying of plants.

## 2.2 Botrytis cinerea or grey mould

### Identification

- Brown stains develop at the foot of the stem, leaf or fruit.
- These stains are covered with grey-brown mildew.
- Often the contamination develops around dead tissue or wounds.
- The underlying tissue is often also discoloured.
- On the flowers spots develop (taint, pepper, pox).
- After contamination the fungus can grow from the contaminated parts to the healthy parts.