

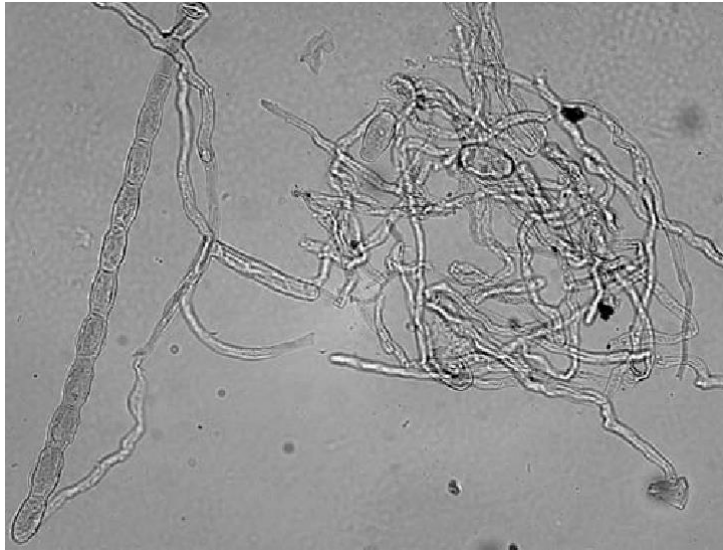
CHS3403 PRINCIPLES OF PLANT PATHOLOGY IN CANNABIS AND HERBS

4. Characteristics and symptoms of fungal diseases

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1. White Powdery Mildew



Sphaerotheca macularis



Leveillula taurica

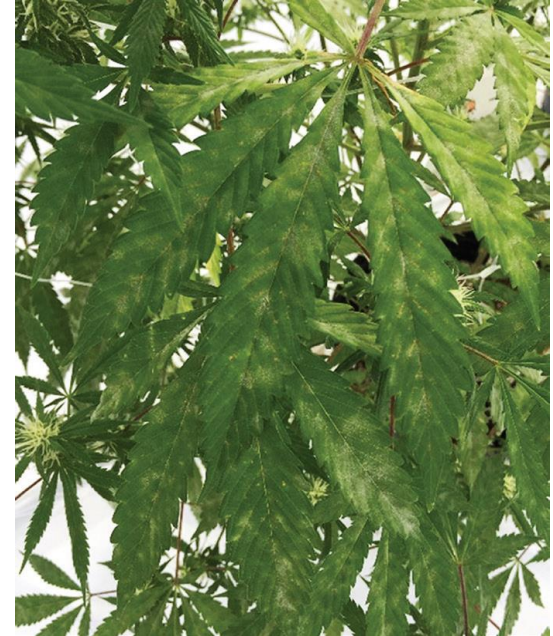
1. White Powdery Mildew

**Cause: *Sphaerotheca macularis* and
Leveillula taurica.**

symptom:

- Light yellow spots appear on the skin.**
- The wound is covered with white fibers.**
- The leaves turn yellow and dry quickly.**

The conditions leading to the outbreak of the epidemic are cold and high humidity (the air humidity is higher than 50% and the temperature is lower than 30 ° C)



1. White Powdery Mildew

disease control

Use chemicals, such as:

Copper sulfate (II) copper sulfate) 30% WP 12.5-25 grams/20 liters of water. Spray once every 5-7 days.

Proprenaline 70% WP 40 grams per 20 liters of water. Spray once every 5-7 days.

Penthiopyrad 20% SC 5-10ml per 20 liters of water. Spray every 5-7 days.

Carbendazine 50% SC 10 ml per 20 liters of water, sprayed every 7 days



Acronyms of pesticide labels

WP: wettable powder, water-soluble powder, powder form. When used, it must be diluted with water. The solution form is suspension.

WG: Water Dispersible Granules The water-soluble granular formula has the same performance and production as WP, and only needs to be made into granules.

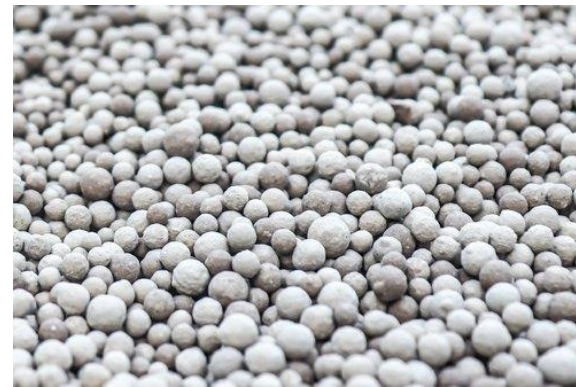
GB: Granular Bait Poison pulp formula, tablet type In the form of tablets, the active ingredient is mixed with food or materials that the animal likes. then made into granules



Acronyms of pesticide labels

SL: Soluble Concentrate The formula is water-soluble liquid. It is a uniformly mixed liquid, which is soluble in water after dilution. The active ingredient is directly soluble in water. The resulting solution is clear.

SG: Water Soluble Granules Water-soluble granular formula. It must be mixed with water before use. The active ingredient is water-soluble, but some non-active substances in the formula are insoluble.



Acronyms of pesticide labels

EC: Emulsifiable Concentrate Concentrated oil is a well mixed liquid. The lotion is milky white after being diluted with water before use.



SC: Suspension Concentrate The concentrated solution is the suspension of active components in the liquid. It shall not precipitate when diluted with water before use.



2. Leaf spot disease

Cause: *Alternaria* spp.

symptom:



-There are brown wounds on the stems and leaves.

-It will cause yellow spots, then turn brown, and the wound formed looks quite round.

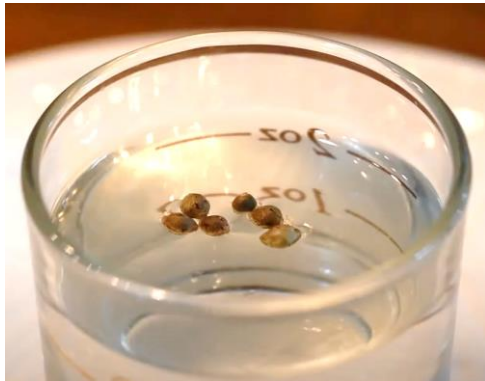
Pathogens can stay in the soil, spread through wind and water, and attach to seeds.



2. Leaf spot disease

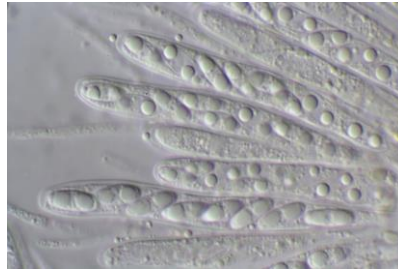
disease control

- ❑ Soak the seeds in warm water at about 50 ° C (prepare warm water with boiling water, then add ordinary water) for 20-30 minutes.
- ❑ Bioavailability: 50 grams of Bacillus subtilis per 20 liters of water
- ❑ Isopropanedione 50% WP 30-40 ml/20 liters of water. Soak seedlings for 15-20 minutes before planting.
- ❑ Mancozeb 80% WP 40-50g/20 liters of wate



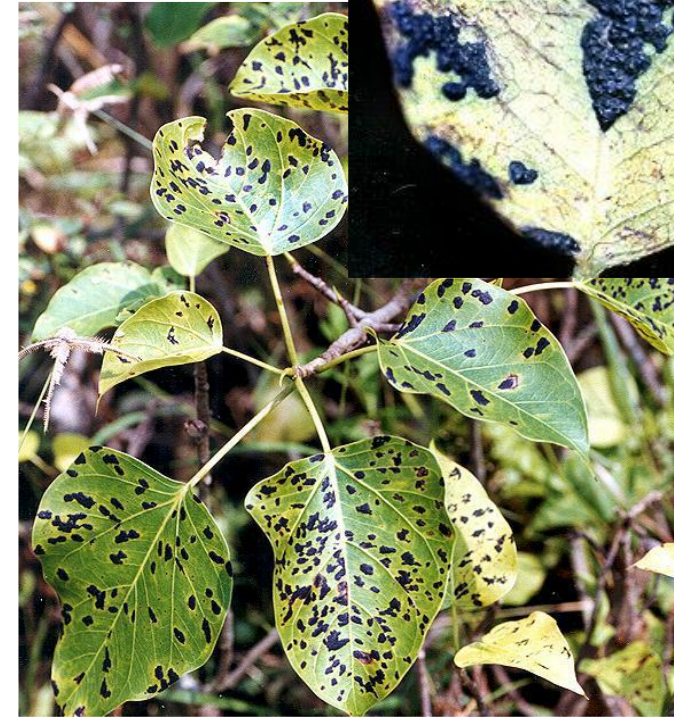
3. Tar spot

Cause : *Phyllachora* sp.



symptom:

-Dark brown or black convex, shiny, round, laminated, can be found on and under the leaves



3. Tar spot

disease control

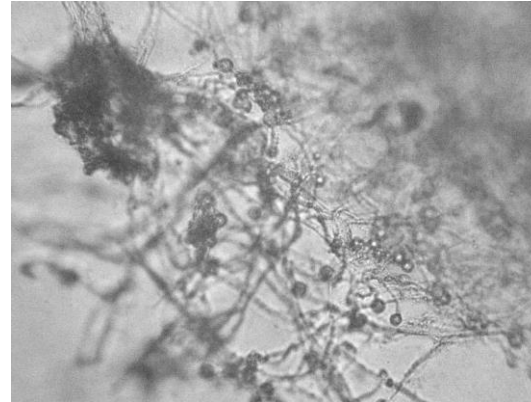
- ❑ Spray 6-12 ml of permethrin and carbendazim every 20 liters of water.
- ❑ If diseased plants are found, remove them and destroy them.



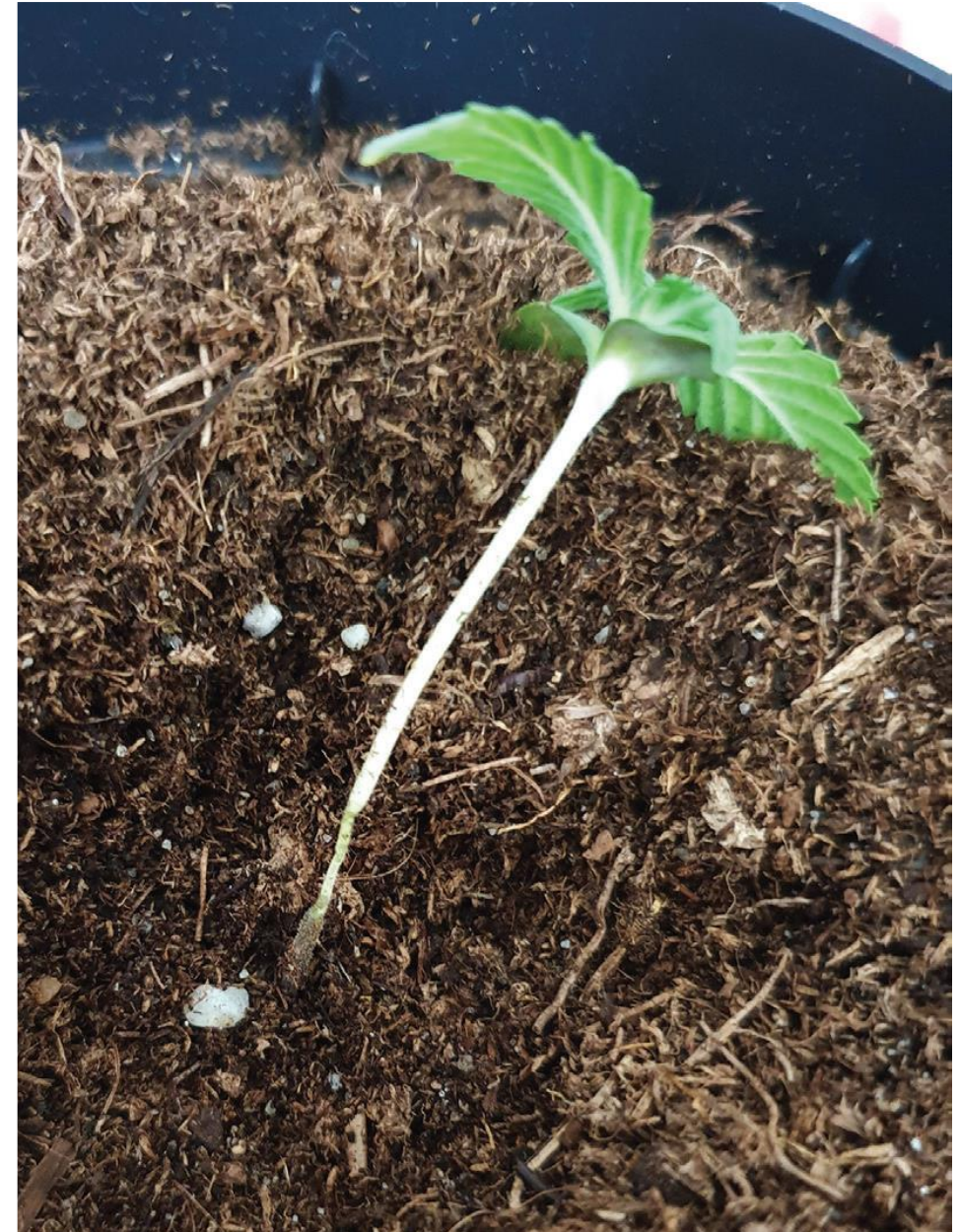
4. soil rot disease

Cause : *Pythium* spp.

symptom:



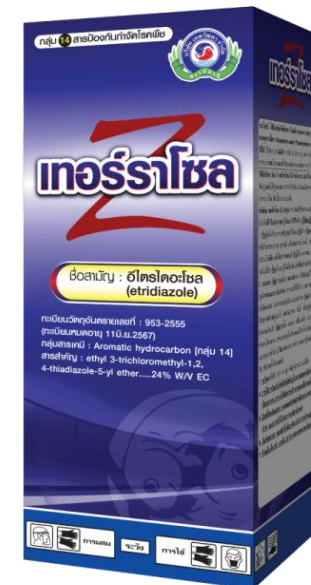
Fungi destroy the tree trunk at the soil level, resulting in rapid decay and drying of the wound, causing the seedling to break and fold.



4. soil rot disease

disease control

- Use clean and sterile culture
- Soak the seeds in warm water at about 50 ° C.
- The dosage of Trichophyton is 15-25 g/strain.
- Etridazole 24% W/V EC 20 ml per 20 liters of water, watered once every 5 days, at least twice



THANK
YOU!

