



CBD Seed Labs

INTEGRATED PEST MANAGEMENT

Key Aspects:

- Scout fields daily for pest damage and outbreaks
- Identify pest or pathogen
- Treat immediately and accordingly, try to keep colonies small and contained
- Isolate or remove contaminated areas
- Be sure to remove all pests/pathogens before harvesting crop

CANNABIS APHIDS



Description

- Small insect but still visible by eye, with piercing-sucking mouths
- Cream colored or light green
- Can be winged or non-winged

Damage

- Sucks out plant sap, leading to discolored foliage and suppressed growth
- Secreted sap results in sooty mold

Management

- Remove infestation carefully by hand and place in bucket (try not to spread to other plants)
- Colonies can be found on the undersides of leaves
- Look for glossy shine on top of leaves, this is their secreted sap and indicates an infestation
- Be on lookout for ants, as they are attracted to the sugary secretion



CORN EARWORM

Description

- Green, brown, or red caterpillars with black lines on backside
- Are seasonal migrants, from June - August

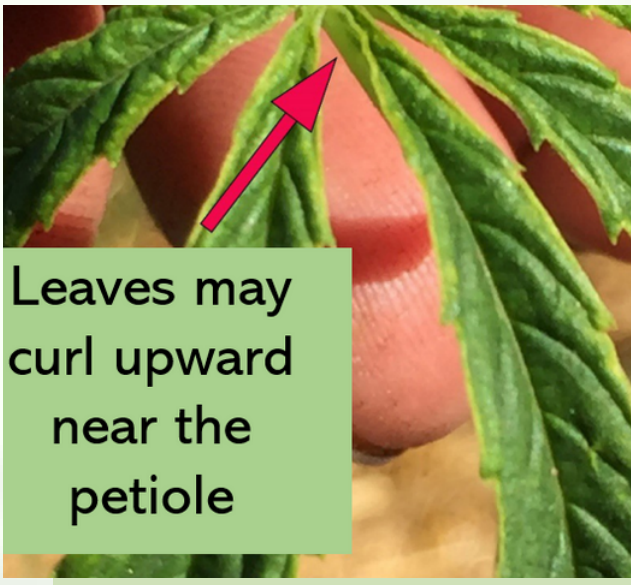
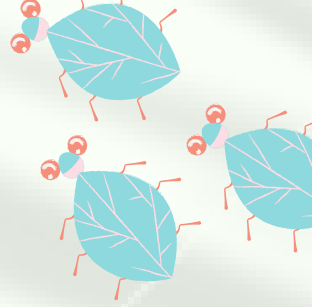
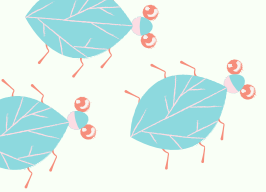
Damage

- Larvae are implanted deep within the flower
- Once hatched the earworm will feed on the bud and leave end trails
- These end trails will rot the bud and spread botrytis
- Botrytis will further damage your crop and create another problem

Management

- Remove rotted buds and try to locate the worm
- Trace end trails to source and eliminate the worm
- If infestation is mass spread, consider using an insecticide caterpillar killer
- Reapply as needed





Leaves may curl upward near the petiole



MITES

Description

- Hemp Russet Mites- tiny white elongated bodies, not visible without magnification
- Two-Spotted Spider Mites- slightly larger yellow-green oval bodies with spots

Damage

- Hemp Russet Mites-
 - Causes leaves to curl, discolor, and become brittle
 - Can reduce flower size
- Two-Spotted Spider Mites-
 - Causes small white specs on leaves, giving a sandpaper appearance
 - Plants can become covered in webbing significantly compromising plant health

Management

- Mites thrive during drought periods and can be spread easily with heavy winds
- Scout fields thoroughly if crop experiences such conditions
- Infestation usually occurs around field edges
- Remove affected area carefully by hand and place in bucket (try not to spread to other plants)
- Use a safe and organic miticide (ex. Dr. Zymes) to spray on plants
- Repeat applications as needed until all living mites and its eggs are eliminated

LEAFHOPPERS

Description

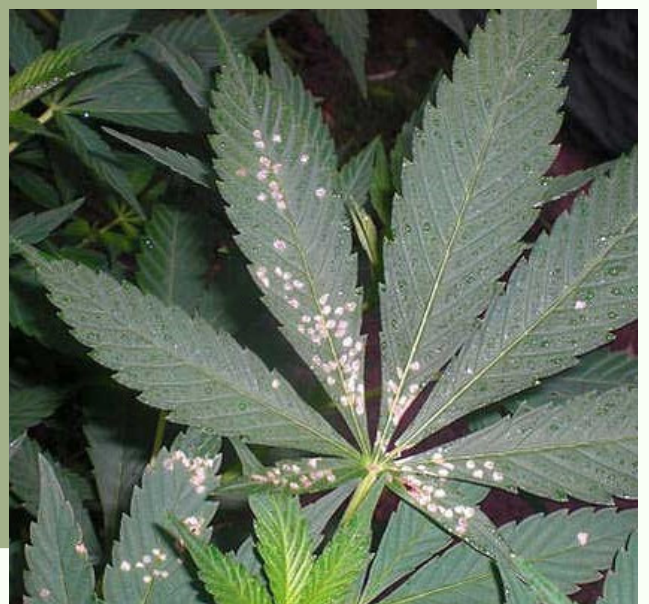
- Wedge like insects around 1/2in
- Can be various colors of green, brown, or gray to multi-colored
- Adults have wings and fly away when disturbed

Damage

- Sucks out plant sap, leading to discolored foliage with yellow/white speckles
- Suppressed plant growth
- Injects toxic saliva into plant material
- Excretes honeydew which can attract ants and leads to fungal pathogens

Management

- Catch and remove leafhoppers by hand if possible
- To eliminate larvae, consider using - insecticidal soap, pyrethrum spray, diatomaceous earth, and neem oil



PATHOGENS

STEM AND ROOT ROT

Description

- Typically the lower part of the stem becomes necrotic and brown
- More common during early stages of growth cycle
- Caused by fungal pathogens- Fusarium spp, Pythium spp, and Botrytis
- Occurs during overwatering and non-draining soil

Damage

- Plant is unhealthy and unable to grow

Management

- Remove affected plant carefully and avoid spreading pathogens to surrounding plants
- Avoid overwatering, and maintain well draining soil



BOTRYTIS (GRAY MOLD/ BUD ROT)

Description

- Found in soil, dead plants, or injured tissue
- Occurs during high humidity and limited air flow

Damage

- Bud and stem become necrotic and dies
- Spores can easily spread, affecting mass areas

Management

- Cut out any bud rot and then spray with a fungicide
- Repeat applications as needed
- Spores will tend to pop up and continue spread
- Vigilantly scan crop and address immediately and effectively
- Increase airflow and avoid planting too close together



POWDERY MILDEW

Description

- White fungus on top of leaves
- Develops during high humidity and low air circulation

Damage

- Reduces plant growth and bud quality

Management

- Remove and destroy affected areas

