

COMMON CANNABIS DISORDERS

WHITE POWDERY MILDEW

HIGH HUMIDITY

- WPM thrives in high humidity, but not necessarily wet, environments. While young plants grow best in humid environments, (40-60% RH), low/no airflow is usually associated with WPM growth.
- Dehumidifiers are important in high humidity growth climates, as well as during the flowering phase, when humidity needs to be low and controlled ($\approx 45\%$ RH) to prevent WPM and Bud Mold.

LOW/NO AIRFLOW

- High humidity will give WPM the conditions it needs to survive, but poor airflow is what gives it the ability to begin forming. A relatively small, preferably oscillating fan moving air in a grow area will prevent the vast majority of WPM issues.

POOR VENTILATION

- If WPM spores are present, and the air in the grow area is not exchanged for fresh air, the spores have increased opportunity to land and begin reproducing. Most common in closed, unventilated areas (e.g. closets, basements) where air exchange precautions are waived in lieu of odor control.

LEAF-TO-LEAF CONTACT

- Leaves touching one another will form moisture between them, which makes these areas more prone to WPM. Untrained, bushy plants with new vegetative growth are especially prone, as leaves are often mashed against each other trying to reach the light.
- Advanced growers can defoliate some of the fan leaves that are completely shaded from the grow light to make fewer ideal spots for WPM to form. Also, proper defoliation frees up energy for the plant to use on worthy leaves, increasing yields.



BUD ROT

COLORING

- Yellow leaves are often among the first signs of Bud Rot.
- Begin examining around leaf color transition to identify Bud Rot source.

TEMPERATURE

- The ideal temperature varies depending on several factors, but Bud Rot prefers cooler temperatures.
- Most recommend temperatures above 68°F to to keep Bud Rot at bay.
- In a greenhouse, try to avoid cold nights by using under bench heating.

PRESENCE OF SPORES

- If you grow indoors, it's much easier to avoid Botrytis Cinerea spores, but you still should be careful about what you let come indoors.
- Change clothes before you enter your facility, and never let pets inside.

FOOD SOURCE

- Bud Rot thrives in parts of your plants that have the most moisture, so keep an eye on your denser colas.
- If you see Bud Rot infection, remove it immediately, and don't let the infected parts of your plants touch the other parts that haven't been affected.

HUMIDITY

- For indoor growers, controlling humidity is one of the easiest ways to avoid problems with Bud Rot.



TOBACCO MOSAIC VIRUS

COLORING

- TMV often results in brown leaves with burnt-looking edges, pale yellow stripes in old and new growth, and/or dark purple/black patches on the leaves.
- A mottled, mosaic pattern on leaves is a major mark of TMV.

GROWTH APPEARANCE

- Both old and new growth can be affected by TMV. If your plant appears stunted, it could be that TMV is slowing it down.
- Leaves may grow in a strange, twisted pattern. They can also appear to be webbed or woven, curling under or upwards in odd ways.
- Stems can be significantly weakened or appear in strange colors like red or purple.



COMMON INSECTS

APHIDS

IDENTIFICATION

- Common soft-bodied pests that pierce cannabis leaves and feed on the juices inside
- Aphids are typically found under the leaves of cannabis plants as small green/black or yellow color.
- Aphids can produce large amounts of a waste substance known as "honeydew". This appears as small, sticky, wet-looking droplets on affected leaves.
- Aphids can carry viruses and diseases that can be systemic in nature.

TREATMENT

- Lady bugs are the most effective natural predator for controlling aphids.
- Prune and clean infected areas immediately.
- Spray organic pesticides or, in extreme cases, essential oils can be used.
- Keep your grow room completely sealed.
- Prevent cross-contamination by implementing strict sanitary SOPs.



RUSSET MITES

IDENTIFICATION

- Russet mites are not visible to the naked eye.
- Initially, symptoms can be mistaken for nutrient deficiencies.
- Leaves will have a glossy, twisted, and wet appearance.
- New growth will have a mangled, damaged structure.
- If left untreated, mites will continue to spread and reproduce, ultimately sapping an entire plant.

TREATMENT

- Prevention is key. Never introduce a clone or plant into a facility unless it's been treated in a sterile quarantined area for several days.
- Introduce a predatory mite regimen in all stages of production.
- Dispose of any and all plants with signs of spider mite damage.
- Prevent cross-contamination by implementing strict sanitary SOPs.
- Confirm with the testing lab that your facility is the first stop of the day.



SPIDER MITES

IDENTIFICATION

- Spider Mites are difficult to identify, as they are merely 0.5mm long.
- The first signs are tiny specks (bite marks) on leaves, as spider mites are often found under the leaves.
- Spider Mites are most common in hot, dry conditions.
- Spider Mites are wind surfers; they disperse over wide areas, riding their webbing on the breezes.
- They are prolific breeders, with aggressive appetites that can quickly destroy crops.

TREATMENT

- Prevention is key. Never introduce a clone or plant into a facility unless it's been treated in a sterile quarantined area for several days.
- Introduce a predatory mite regimen in all stages of production.
- Dispose of any and all plants with signs of spider mite damage.
- Prevent cross-contamination by implementing strict sanitary SOPs.
- Confirm with the testing lab that your facility is the first stop of the day.



PREVENTATIVE ACTION & PRECAUTION WILL ALWAYS YIELD BEST RESULTS VERSUS REACTIVE TREATMENT. RESEARCH & CONTROL OVER GROWING CONDITIONS IS PARAMOUNT TO ACHIEVING THE BEST PRODUCT POSSIBLE. CONTACT US TO LET US KNOW HOW WE CAN HELP.



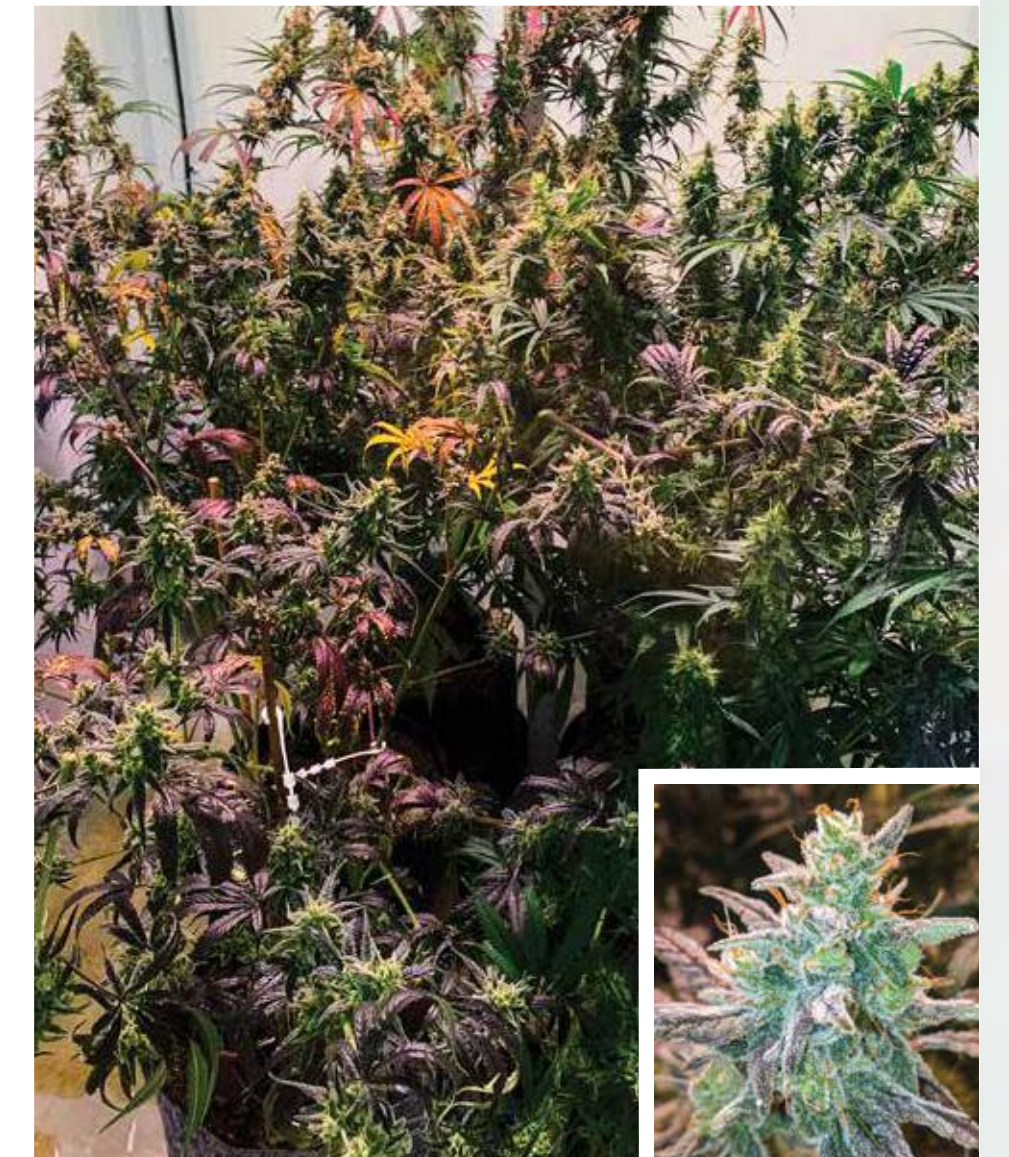
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GC PRESSURE ATMOSPHERE ROOMS



Standard Grow Room



Patent Pending GC Pressure Atmosphere Grow Room



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Controlled Atmosphere & Custom Facility Energy Management Equipment



QUAD Sensor for CO₂, RH, Temperature & Light



Patented CO₂ Safety Valve Interior Relief System with Isolated Fresh Air Blower
CurPod: 20lb Capacity for Finish Dry/Cure or Low Oxygen Preservation.

