

A Pocket Guide to Pesticides Found in Illegal Cannabis Grow Operations





The Department of Pesticide Regulation (DPR) Cannabis Program works to protect human health and the environment from the adverse effects of illegal pesticide use on cannabis.

Illegal cannabis cultivators often misuse highly toxic, illegal pesticides. This leaves law enforcement, clean-up, and remediation crews at risk for exposure to potentially harmful chemicals.

This pocket guide contains an alphabetical list by type (fungicides, insecticides, miticides, plant growth regulators, and rodenticides) of chemicals routinely found in illegal cannabis grow sites. It includes descriptions, acute symptoms of exposure, and recommended personal protective equipment (PPE). For long-term side effects, consult a physician.

The products included in this guide were identified by law enforcement agencies through pictures and documentation of products commonly found at illegal grow sites.

The mention or identification of commercial pesticide products or trade names is not to be construed as either an actual or implied endorsement of such product or trade name by the State of California or the Department of Pesticide Regulation.

This guide is intended for informational purposes only for law enforcement and other agencies entering illegal cannabis grow sites.

Call **911** for emergency help. Contact the **California Poison Control System** at **(800) 222-1222** if you think you are experiencing symptoms of pesticide exposure.



PESTICIDE SAFETY TERMINOLOGY

Hazard Levels

DANGER - Highly toxic/fatal or corrosive

WARNING - Moderately toxic

CAUTION - Slightly toxic



Restricted Pesticides

A pesticide is deemed restricted based on the potential adverse effects it can have on human health or the environment. California restricted materials (which include federal restricted use pesticides) are regulated more tightly than general use pesticides.

Decontamination

Personnel and equipment should be decontaminated to the best of your ability when handling plants and material contaminated with pesticides. Always follow decontamination requirements found on a pesticide label and follow your agency's decontamination procedures.

FUNGICIDE

FERRIC SULFATE



Non-restricted

Common brand: Moss Out

Description: Grayish-white or yellow; powder or crystalline, lumpy solid, liquid

Found: In soil

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure: Eye, skin,

respiratory tract, and digestive tract irritation

PPE: Safety glasses, chemical resistant gloves, dust mask

Signal words may include: **CAUTION**, **WARNING**, **DANGER**

FUNGICIDE OR PLANT GROWTH REGULATOR

PACLOBUTRAZOL

Non-restricted

Common names/brands: Pac-Low, Trimmit, Bonzi, Cultar

Description: White; liquid, wettable powder

Found: On plants and in soil

Routes of exposure: Dermal, inhalation

Symptoms of exposure: Eye, skin, and respiratory tract irritation

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator

Signal words may include: **CAUTION,**
WARNING, DANGER

FUNGICIDE

TEBUCONAZOLE

Non-restricted

Common names/brands: ArmorTech, Offset, Omni Brand, Muscle, Onset, Orius, Quali-Pro

Description: Pale yellow; liquid, dust, granules, emulsions

Found: On plants and ground

Odor: Metallic

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure: Eye and skin irritation

PPE: Safety glasses, chemical resistant gloves, dust mask

Signal words may include: **CAUTION**, **WARNING**, **DANGER**

INSECTICIDE

PYRETHROID

BIFENTHRIN

Non-restricted

Common names/brands:

Ortho Max, Bug B Gon, Eliminator, Bifen

Description: Tan to off-white; liquid or granules

Found: On plants and ground

Routes of exposure:

Dermal, inhalation, ingestion, eyes

Symptoms of exposure:

Eye irritation, respiratory

tract irritation, skin tingling, burning, itchiness

Sensations generally subside after 12 hours

PPE: Safety glasses, chemical resistant gloves



Signal words may include: **CAUTION,**
WARNING, DANGER



INSECTICIDE

CARBAMATE

CARBARYL

Restricted material (except as bait)

Common names/brands: Sevin, Corry's, Kiwicare

Description: White/tan/brown; liquid, dust, granules, water soluble packages

Found: On plants and ground

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure: Fatigue, weakness, dizziness, confusion, nausea, vomiting, diarrhea, blurred vision, headache, sweating, tearing, drooling, tunnel vision, twitching, pinpoint pupils, difficulty breathing

Cholinesterase inhibitor: May impair the nervous system

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator

Signal words may include: **CAUTION**, **WARNING**, **DANGER**



INSECTICIDE

CARBAMATE

CARBOFURAN

BANNED IN THE U.S.

Common names/brands: Furadan, Q-Furan, Coradan, Furatox, JET, Novadan, Galfuran

Description: Pink; liquid, granules, dust

Found: On plants and in water bottles

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure: Fatigue, weakness, dizziness, confusion, nausea, vomiting, diarrhea, blurred vision, headache, sweating, tearing, drooling, tunnel vision, twitching, difficulty breathing

Cholinesterase inhibitor: May impair the nervous system

PPE: Safety glasses, chemical resistant gloves, respirator with organic vapor cartridges and pesticide pre-filter

Signal words may include: **WARNING**,
DANGER

INSECTICIDE

CHLORFENAPYR

Non-restricted

Common names/brands: Phantom, Pylon, Pirate, Spectre

Description: White liquid

Found: On plants

Routes of exposure: Dermal, eyes, inhalation

Symptoms of exposure: Eye irritation, skin irritation, dizziness, nausea, vomiting, difficulty breathing, respiratory irritation

PPE: Safety glasses, chemical resistant gloves

Signal words may include: **CAUTION, WARNING**

CYHALOTHRIN

Non-restricted

Common names/brands:

Gamma-cyhalothrin, Lambda-cyhalothrin, Triazicide, Optimate, Demand, Karate, Warrior

Description: Colorless to beige; powder, pellets, liquid, small capsules

Found: On plants and ground

Routes of exposure: Dermal, inhalation

Symptoms of exposure: Eye irritation, skin tingling, burning, prickling feelings (particularly around the face), dizziness, headache, nausea, and fatigue

PPE: Safety glasses, chemical resistant gloves, dust mask



Signal words may include: **CAUTION**, **WARNING**, **DANGER**

CYPERMETHRIN

Non-restricted

Common names/brands:

Carex, Ammo, Cyperkill, Demon, Cyperfil, Cyper10

Description: Pale yellow; emulsifiable concentrate, wettable powder

Found: On plants

Routes of exposure:

Inhalation, dermal, ingestion

Symptoms of exposure: Skin tingling, burning and itching, eye redness and irritation, respiratory irritation, difficulty breathing

PPE: Safety glasses, chemical resistant gloves, dust mask



Signal words may include: **CAUTION**, **WARNING**, **DANGER**

DIAZINON

Non-restricted

Common names/brands: Diazinon Insect Spray, Lawn & Garden Insect Spray, Terminator, Compass

Description: Colorless to dark brown; dust, granules, spray, concentrate, seed dressings

Found: On plants

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure:

Fatigue, weakness, dizziness, confusion, nausea, vomiting, blurred vision, headache, sweating, tearing, drooling, tunnel vision, twitching, difficulty breathing

Cholinesterase inhibitor: May impair the nervous system

PPE: Safety glasses, chemical resistant gloves, respirator with organic vapor cartridges and pesticide pre-filter

Signal words may include: **CAUTION**, **WARNING**, **DANGER**



INSECTICIDE

NEONICOTINOID

IMIDACLOPRID

Non-restricted

Common names/brands:

Bayer Insect Disease & Mite Control, Quali-Pro, Admire Pro, Criterion

Description: Pale yellow; liquid, granules, dust

Found: On plants

Routes of exposure: Dermal, inhalation

Symptoms of exposure:

Skin irritation, eye irritation, headache, dizziness, difficulty breathing

PPE: Safety glasses, chemical resistant gloves, dust mask



Signal words may include: **CAUTION**, **WARNING**, **DANGER**

MALATHION



Non-restricted

Common names/brands:

Ortho-Malathion Plus, Malathion Insect Spray, Bonide, Southern Ag, Hi-Yield

Description: Yellow-brown concentrate, oil solutions

Found: On plants

Odor: Garlic

Routes of exposure:

Dermal, inhalation, ingestion

Symptoms of exposure:

Fatigue, weakness, dizziness,

confusion, blurred vision, headache, sweating, tearing, drooling, twitching, difficulty breathing

Cholinesterase inhibitor: May impair the nervous system

PPE: Safety glasses, chemical resistant gloves, respirator with organic vapor cartridges and pesticide pre-filter

Signal words may include: **CAUTION**, **WARNING**, **DANGER**

METHAMIDOPHOS

BANNED IN THE U.S.

Common names/brands:

Metamidofos, Monitor,
Tamaron, Filitox, Tamanox,
Metaldane 600, Bitrad

Description: White; soluble
and emulsifiable concentrate

Found: On plants

Routes of exposure: Dermal, inhalation,
ingestion

Symptoms of exposure: Fatigue, weakness,
dizziness, confusion, nausea, vomiting,
blurred vision, headache, sweating, tearing,
drooling, tunnel vision, twitching, abdominal
cramps, tremors, difficulty breathing

Cholinesterase inhibitor: May impair the
nervous system

PPE: Safety glasses, chemical resistant
gloves, organic vapor cartridge respirator with
pesticide pre-filters



Signal words may include: **WARNING,**
DANGER

METHOMYL

Restricted material (except as fly baits containing <1% methomyl)

Common names/brands: Lannate, Lanox, Nudrin, Orion, Scorpio, Dragon, Imtrade

Description: Pale yellow; liquid, granules, dust, wettable powder, emulsifiable and soluble concentrate, bait

Found: On plants

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure: Fatigue, weakness, dizziness, confusion, nausea, vomiting, blurred vision, headache, sweating, tearing, drooling, tunnel vision, twitching, difficulty breathing

Cholinesterase inhibitor. May impair the nervous system

PPE: Safety glasses, chemical resistant gloves, organic vapor cartridge respirator with pesticide pre-filters

Signal words may include: **CAUTION**,
DANGER

METHYL PARATHION

BANNED IN THE U.S.

Common names/brands: Merit, Metaphos, Metafos, Foldol

Description: White or brownish dust, wettable powder

Found: On plants

Odor: Garlic

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure: Fatigue, weakness, dizziness, confusion, nausea, vomiting, blurred vision, headache, sweating, tearing, drooling, tunnel vision, twitching, abdominal cramps, tremors, difficulty breathing

Cholinesterase inhibitor: May impair the nervous system

PPE: Safety glasses, chemical resistant gloves, organic vapor cartridge respirator with pesticide pre-filters

Signal words may include: **WARNING**, **DANGER**



INSECTICIDE

NEEM OIL

Non-restricted

Common names/brands:

Garden Safe, Safer,
Natria

Description: Yellow to brown liquid, granules, dust, wettable powder, emulsifiable concentrate

Found: On plants

Odor: Garlic-sulfur

Routes of exposure: Dermal, inhalation

Symptoms of exposure: Eye and skin irritation, nausea, vomiting, headache

PPE: Safety glasses, chemical resistant gloves, dust mask



Signal words may include: **CAUTION,**
WARNING

PROPOXUR

Non-restricted

Common names/brands: Baygon, Flycobait, Hockley, Mitoxur, FIGHTER, NOFLEE

Description: Pale yellow; emulsifiable concentrate, wettable powder, bait, dust

Found: Ground - surrounding grow

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure: Fatigue, weakness, dizziness, confusion, nausea, vomiting, blurred vision, headache, sweating, tearing, drooling, tunnel vision, twitching, pinpoint pupils, difficulty breathing

Cholinesterase inhibitor: May impair the nervous system

PPE: Safety glasses, chemical resistant gloves, organic vapor cartridge respirator with pesticide pre-filters

Signal words may include: **CAUTION**, **WARNING**, **DANGER**

INSECTICIDE

SPINOSAD

Non-restricted

Common names/brands: Antixx Fire Ant Bait, Ortho Ant Bait, Green Light, Entrust, Conserve

Description: Light gray to white; liquid, dust, granules, pellets, suspension

Found: On plants and ground

Routes of exposure: Dermal, inhalation

Symptoms of exposure: Difficulty breathing, headache, eye and skin irritation

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator

Signal words may include: **CAUTION**

MITICIDE

ETOXAZOLE

Non-restricted

Common names/brands: TetraSan, Zeal, Beethoven

Description: Brown; granules, aerosol, liquid

Found: On plants and ground

Routes of exposure: Dermal, inhalation, eyes

Symptoms of exposure: Eye, skin, respiratory tract, and digestive tract irritation, headache, dizziness, weakness, and nausea

PPE: Safety glasses, chemical resistant gloves, dust mask

Signal words may include: **CAUTION**

PLANT GROWTH REGULATOR

DAMINOZIDE

BANNED IN THE U.S.

Common names/brands: Alar, Kylar, B-NINE, Hi-Daminozide

Description: White; water soluble powder, liquid

Found: On plants

Routes of exposure: Dermal, inhalation

Symptoms of exposure: Eye irritation, skin irritation

PPE: Safety glasses, waterproof gloves, dust mask

Signal words may include: **CAUTION,**
DANGER

ALUMINUM PHOSPHIDE

Restricted material

Common names/brands:

Weevil-cide, Fastphos,
Fumitoxin, Phosfume,
Phostoxin, Max-Kill

Description: Gray/green/
yellow; pellets, tablets, dust

Found: Ground -
surrounding grow

Produces poisonous/ flammable phosphine gas when wet. Watch for water lines, ponds, and other wet areas

Odor: Garlic/decaying fish (phosphine)

Routes of exposure: Inhalation, ingestion

Symptoms of exposure: Chest tightness,
abdominal pain, headache, dizziness,
vomiting, difficulty breathing

PPE: Safety glasses, chemical resistant
gloves, respiratory protection approved
for phosphine gas

Signal words may include: **DANGER**



RODENTICIDE

BRODIFACOUM

Restricted material

Common names/brands: Talon-G, Final, Havoc, Rodex, Jaguar, Rodenthor

Description: Red/pink or blue/green pellets

Found: Ground - surrounding grow

Routes of Exposure: Dermal, inhalation, ingestion

Symptoms of exposure:

Anticoagulant: Can cause internal bleeding after multiple ingestions or inhalation of dust. Irritating to the eyes

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator



Signal words may include: **CAUTION**

BROMETHALIN

**Non-restricted
Common
names/brands:**

Real-Kill, TomCat,
Assault, Black Flag,
Cykill, Fastrac, Just
One Bite, Take Down,
Rampage

Description: Green;
paraffin blocks, bait
pellets

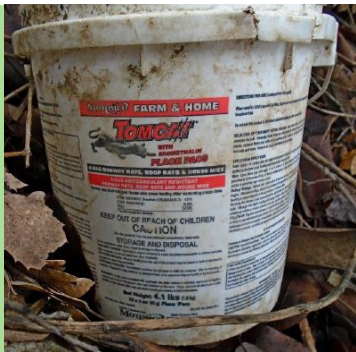
Found: Ground - surrounding grow

Routes of exposure: Dermal, ingestion,
inhalation, eyes

Symptoms of exposure: Numbness, eye
irritation, headache, confusion, personality
change, loss of coordination, tremors

Neurotoxin: May damage nervous system

PPE: Safety glasses, chemical resistant
gloves, N95 facepiece respirator



Signal words may include: **CAUTION,
WARNING**

RODENTICIDE

CHOLECALCIFEROL

Non-restricted

Common names/brands:

d-Con, Terad3

Description: Bait pellets and blocks

Found: Ground - surrounding grow

Routes of exposure:

Ingestion, inhalation, dermal

Symptoms of exposure: Nausea, vomiting, abdominal cramps

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator



Signal words may include: **CAUTION**



RODENTICIDE

DIPHACINONE

Non-restricted

Common names/brands: d-Con, Ditrac, Gopher Getter, TomCat, Ramik, Kaput, Top Gun, Bait Block

Description: Green bait

Found: Ground - surrounding grow

Routes of exposure: Dermal, inhalation, ingestion

Symptoms of exposure:

Anticoagulant: Can cause internal bleeding after multiple ingestions or inhalation of dust. Irritating to the eyes

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator

Signal words may include: **CAUTION, WARNING, DANGER**

STRYCHNINE



Non-restricted

Common names/brands: Cooke Gopher Mix, Gopher Getter Type 1, Martin's "Gopher Bait"

Description: Red, blue; grain-based bait or paste, liquid

Found: Ground - surrounding grow

Routes of exposure: Inhalation, ingestion

Symptoms of exposure:

Eye irritation, skin irritation, muscle spasms, agitation, restlessness, headaches, dizziness, seizures, difficulty breathing, nausea, vomiting

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator

Signal words may include: **WARNING**,
DANGER

WARFARIN

Non-restricted

Common names/brands:

Warfarin Rat & Mouse Bait, Bonide Rat Magic, Kaput, Rodex Rat and Mouse Bait, Wilsarin Rat and Mouse Killer

Description: Green; dry or liquid bait, dust

Found: Ground - surrounding grow

Routes of exposure: Inhalation, ingestion

Symptoms of exposure:

Anticoagulant: Can cause internal bleeding after multiple ingestions or inhalation of dust. Irritating to the eyes

PPE: Safety glasses, chemical resistant gloves, N95 filtering facepiece respirator



Signal words may include: **CAUTION**, **WARNING**, **DANGER**

ZINC PHOSPHIDE

Restricted material

Common names/brands: Ratone, Mole Killer, Prozap, Ratnil, Ratbite, Vita, Ratkil, Ratox

Description: Brown; bait pellets or tablets, dust

Found: Ground - surrounding grow

Produces poisonous/flammable phosphine gas when wet. Watch for in water lines, ponds, and other wet areas

Odor: Garlic/decaying fish (phosphine)

Routes of exposure: Dermal, inhalation

Symptoms of exposure: "Feeling cold" all over, chest tightness, abdominal pain, headache, dizziness, blurred vision, fatigue, vomiting, difficulty breathing, skin irritation

PPE: Safety glasses, chemical resistant gloves, respiratory protection approved for phosphine gas



Signal words may include: **CAUTION, WARNING, DANGER**

CHEMICALS LISTED IN THIS GUIDE

Fungicides PP. 4-6

Ferric Sulfate
Paclobutrazol
Tebuconazole

Insecticides PP. 7-21

Bifenthrin
Carbaryl
Carbofuran
Chlorfenapyr
Cyhalothrin
Cypermethrin
Diazinon
Imidacloprid
Malathion
Methamidophos
Methomyl
Methyl Parathion
Neem Oil
Propoxur
Spinosad

Miticide P. 22

Etoxazole

Plant Growth Regulators PP. 5, 23

Daminozide
Paclobutrazol

Rodenticides PP. 24-31

Aluminum Phosphide
Brodifacoum
Bromethalin
Cholecalciferol
Diphacinone
Strychnine
Warfarin
Zinc Phosphide

If you have any questions or need more information, please contact your local County Agricultural Commissioner's office or contact DPR's Cannabis Program at: (916) 445-5010.

Input on this guide was provided by: California Department of Pesticide Regulation, California Department of Fish and Wildlife, California Department of Justice, and the California State Sheriffs' Association.

CANNABIS 01 1019



<https://www.cdpr.ca.gov/cannabis>

