






Mealybugs & Cactus Pests


Identify what's eating your cactus, then beat it with a clear escalation ladder — from an alcohol swab to a systemic soil drench. The pest the cult voted #1 (59%), covered properly.

You voted, and **mealybugs and pests took it by a landslide (59%)**. Fair — they're the most common thing that quietly wrecks an otherwise healthy collection. This guide does it in order: **identify first, then treat, then prevent**. Skip the ID step and you'll spray the wrong thing at the wrong bug.

1. Know Your Enemy — Pest ID

Five pests cause the vast majority of cactus trouble. Match the signs before you reach for anything:

Pest	What you see	Where	Damage
 Mealybugs	White, cottony, fuzzy clusters that look like mold or lint	Areoles, spine bases, ribs, crevices	Suck sap → yellowing, stunting, sticky honeydew, sooty mold
 Root mealybugs	White cottony masses + waxy residue on roots and inner pot wall	Underground — in the root ball	Hidden sap loss → mystery decline, failure to grow
 Spider mites	Fine webbing; rusty/bronze stippling on skin	New growth, growing tip	Permanent bronze scarring on the epidermis
 Scale	Hard brown or white waxy bumps that don't wipe off easily	Ribs, stems	Sap loss, yellow spotting
 Fungus gnats	Tiny black flies hovering at the soil surface	Topsoil (larvae in wet mix)	Mostly a symptom — your soil is staying too wet

 **The 30-second check:** White and *cottony* = mealybug. White and *fuzzy on the roots* = root mealybug. *Webbing* = spider mites. *Hard bump that won't wipe off* = scale. *Flies at the soil* = fungus gnats (and overwatering).

2. Mealybugs — The #1 Offender

Mealybugs are small, soft sap-sucking insects that cover themselves in a white waxy "cotton" coat. That wax is their armor — it makes them water-resistant, so a plain water spray does almost nothing. They breed fast, hide in tight crevices, and spread plant-to-plant by crawling, so **one infested cactus becomes five if you ignore it.**

They leave behind sticky **honeydew** (their sugary waste), which grows black **sooty mold** — so a cactus that looks dirty and sticky usually has a mealybug problem you haven't found yet. Always check the hidden spots: deep between ribs, under the soil line, and right in the areoles.

3. The Treatment Ladder

Start at the lowest rung that fits the size of the problem. Move up only if you need to.

1 Spot-treat with 70% isopropyl alcohol

For a handful of visible bugs. Dip a cotton swab in **70% isopropyl (rubbing) alcohol** and touch each cluster directly. The alcohol cuts through the waxy coat and dehydrates them on contact — you'll see the cotton "melt." It's gentle enough for cactus skin, which is why it beats sprays for spot work.

2 Alcohol spray for heavier infestations

If they're everywhere, mix a **10–25% isopropyl alcohol solution** in a spray bottle and coat the plant, getting into every crevice. **Repeat weekly until you've seen nothing for two to three weeks** — that timing matters because it catches the next generation as eggs hatch. One treatment never finishes the job.

3 Systemic soil drench — last resort

For infestations you can't get on top of, a systemic insecticide containing **imidacloprid** applied as a **soil drench** is taken up by the roots and makes the plant's sap toxic to anything feeding on it, for 4–8 weeks. Apply to the soil, not as a spray, and use it only on non-edible ornamentals as a genuine last step. It's the only thing that reliably reaches bugs hidden underground.

⚠️ **Neem oil caution on cacti:** Neem works on many plants, but on cacti and other succulents the oil can **clog the skin's pores (stomata) and scorch tissue** — especially in bright sun or temperatures above ~29°C / 85°F. If you use it, do so in the evening, out of direct sun, on a cool day, and test one plant first. Alcohol is the safer default for cacti.

4. Root Mealybugs — The Hidden One

If a cactus is mysteriously failing — not growing, slightly off-color, no pests visible above the soil — **check the roots**. Succulents are especially prone to root mealybugs, which live entirely in the root ball and look like white cottony specks and waxy powder among the roots and on the inside of the pot.

1. **Unpot** and bare-root the plant; knock off all the old soil.
2. **Rinse the roots** thoroughly under running water to physically remove the colonies.
3. **Soak the roots** in a systemic (imidacloprid) solution, or trim badly infested roots with a sterile blade.
4. **Repot in fresh, dry mix** and a clean pot — never reuse the infested soil or pot.
5. **Re-inspect every 3 months** during treatment by unpotting again. They're stubborn; one pass rarely clears them.

5. Try It in Gritty Mix

🎮 **Practice the ladder without risking a real plant.** In [Gritty Mix](#), our cactus cultivation game, pests now strike your collection as random events — and you have to pick the *right* treatment to save the plant. Choose correctly (alcohol for mealybugs, dry-out for fungus gnats) and the cactus recovers; guess wrong and it loses more health. It's this exact decision tree, gamified. [Open Gritty Mix →](#)

6. Quick Self-Triage

Answer one question and get pointed at the right rung:

7. Prevention — Stop the Next One

- **Quarantine new arrivals.** Keep every new cactus away from your collection for 2–3 weeks and inspect it. Most infestations arrive on a new plant.
- **Inspect on a schedule.** Look in the areoles and crevices when you water. Catching 3 bugs is a swab; catching 300 is a soil drench.
- **Don't over-fertilize.** Soft, lush, nitrogen-pushed growth is exactly what sap-suckers want. Lean feeding = tougher plants.
- **Airflow.** Still, stagnant air helps pests and mold settle in. A moving breeze makes life harder for them.
- **Isolate at first sight.** The moment you find mealybugs, move that plant away from the others before they crawl.

8. The Other Four — Quick Reference

Spider Mites

Rinse the plant, raise humidity slightly, and treat with a miticide if it persists. The bronze scarring is permanent — new growth comes in clean.

Scale

Scrape the waxy bumps off with a toothpick or old toothbrush, then spot-treat with alcohol. Same systemic option for bad cases.

Fungus Gnats

Not really a pest problem — a **watering** problem. Let the soil dry fully, switch to a grittier mix, and add yellow sticky traps for the adults.

Ants

Ants farm mealybugs and scale for honeydew. If you see ant trails on a cactus, there's almost always a sap-sucker they're protecting — find it.

9. Keep Going



Fungal Issues Guide

Rot, spots & disease



Grower Guide

Soil, water, light



Play Gritty Mix

Pest treatment scenario



Cactus Codex

Species reference

Sources

Treatment guidance cross-checked against [UC IPM \(University of California Statewide Integrated Pest Management\)](#) and grower consensus from [CactiGuide.com](#). Always follow the label on any insecticide product.

Part of [Cactus Codex](#) · [Gritty Mix game](#) · [revolutionarydesigns.io](#)