



FROM THE FILES OF THE DIRT DIVA DIARIES  
**Pest & Disease Pocket Guide**

*Spot it fast, fix it organically, keep your garden growing*

**Ivy says:** "Something's eating your plants. Take a breath — we've got this. The secret to pest control is catching problems early and starting with the gentlest fix first. This guide tells you exactly what you're looking at, what to do about it, and when to escalate. Containers actually make pest control easier — you can inspect every plant up close and treat individually."

**COMMON CONTAINER PESTS — IDENTIFY & ACT**

Sucking Pests <span style="float: right;">PEST</span>			
PEST	WHAT TO LOOK FOR	PLANTS AT RISK	ORGANIC FIX (START HERE → ESCALATE IF NEEDED)
<b>Aphids</b>	Tiny pear-shaped insects (green, black, white); clusters on new growth; sticky honeydew; curled leaves	Tomatoes, peppers, kale, roses, most soft-stemmed plants	1) Knock off with strong water spray · 2) Insecticidal soap spray · 3) Neem oil · Repeat every 3-4 days
<b>Spider Mites</b>	Fine webbing on undersides of leaves; stippled/yellowing leaves; tiny moving dots (0.5mm); worse in hot dry weather	Tomatoes, peppers, cucumbers, beans, herbs	1) Increase humidity, mist leaves · 2) Insecticidal soap · 3) Neem oil · Isolate affected plant immediately
<b>Whiteflies</b>	Tiny white flying insects; cloud appears when plant disturbed; yellowing leaves; sticky residue	Tomatoes, peppers, squash, basil	1) Yellow sticky traps · 2) Insecticidal soap on undersides of leaves · 3) Neem oil · Repeat weekly
<b>Thrips</b>	Silver streaking or stippling on leaves; tiny slender insects (1mm); distorted new growth; black fecal dots	Peppers, onions, flowers; most plants	1) Remove affected leaves · 2) Insecticidal soap · 3) Spinosad (organic spray) · Blue sticky traps
<b>Scale insects</b>	Brown/tan bumps on stems and leaves that don't rub off; sticky honeydew; sooty black mold	Citrus, bay laurel, most woody plants	1) Scrape off with soft brush · 2) Rubbing alcohol on cotton swab · 3) Horticultural oil spray · Repeat monthly

Chewing Pests <span style="float: right;">PEST</span>			
PEST	WHAT TO LOOK FOR	PLANTS AT RISK	ORGANIC FIX
<b>Caterpillars / Hornworms</b>	Large irregular holes in leaves; fat green caterpillars (hornworms can be 4"); black frass (droppings) on leaves	Tomatoes (hornworms), basil, kale, cabbage	1) Handpick into soapy water · 2) BT ( <i>Bacillus thuringiensis</i> ) spray — organic, safe for edibles · Repeat after rain
<b>Slugs &amp; Snails</b>	Ragged holes in leaves, especially at edges; slime trails; damage mainly at night or after rain	Lettuce, basil, seedlings, strawberries	1) Check under containers at night and handpick · 2) Copper tape barrier around pots · 3) Iron phosphate bait (organic, pet-safe)
<b>Fungus Gnats (larvae)</b>	Tiny black flies hovering around soil; larvae in soil damage roots; wilting despite moist soil; seedling collapse	All seedlings and young plants; worse in overwatered containers	1) Let soil dry out between waterings · 2) Yellow sticky traps · 3) BTi ( <i>Bacillus thuringiensis israelensis</i> ) soil drench · Bottom-water to keep surface dry

**The Organic Pest Toolkit**

**Insecticidal Soap**

Aphids, mites, whiteflies. Kills on contact. Safe for edibles. Reapply every 4-5 days.

**Neem Oil**

Broad-spectrum. Disrupts pest lifecycle. Best as preventive. Don't apply in direct sun.

**BT (*Bacillus thuringiensis*)**

Caterpillars only. Totally safe for beneficial insects, pets, people.

**Sticky Traps**

Yellow = whiteflies & fungus gnats. Blue = thrips. Monitor, not control.

**Strong Water Spray**

First response for aphids and mites. Free. Effective. Do it daily for a week.

**Diatomaceous Earth**

Apply to soil surface for crawling pests. Loses effectiveness when wet.

**Ivy's Pest Prevention Rules**

- ✦ Inspect plants every time you water — catch problems at 5 bugs, not 500
- ✦ Isolate any plant that looks "off" immediately — don't let pests spread container to container
- ✦ Good airflow between containers reduces pest and disease pressure dramatically
- ✦ Container advantage: pests can't spread through soil like in-ground gardens
- ✦ Healthy, well-fed plants resist pests better — stressed plants attract them

**Escalation Rule**

- ✗ Start with the gentlest fix first — water spray before insecticidal soap before neem oil
- ✗ Wait 3-4 days between treatments to assess effectiveness
- ✗ Never spray beneficial insects (bees, ladybugs) — spray in evening when pollinators aren't active
- ✗ If all organic options fail: remove and dispose of the plant. Don't let one plant destroy others.



## FROM THE FILES OF THE DIRT DIVA DIARIES Disease ID & Action Guide

Fungal, bacterial & viral — what it looks like, what to do

**Ivy says:** "Here's the hard truth about plant diseases: most of them don't have a cure. But early diagnosis means you can stop the spread, save your other plants, and understand what went wrong so it doesn't happen again. The good news? Container gardening dramatically reduces disease pressure because your plants aren't connected through the soil."

### ↑ FUNGAL DISEASES — MOST COMMON IN CONTAINER GARDENS

↑ Fungal Diseases					FUNGAL
DISEASE	WHAT TO LOOK FOR	PLANTS AT RISK	CAUSES	WHAT TO DO	
<b>Powdery Mildew</b>	White powdery coating on leaf surfaces; starts as spots, spreads to cover whole leaf; worse in warm days/cool nights	Cucumbers, squash, peppers, tomatoes, herbs	Poor airflow; warm temps; dry conditions (surprisingly)	Remove affected leaves · Baking soda spray (1 tsp/quart water) · Neem oil · Improve airflow · No cure — manage spread	
<b>Early/Late Blight</b>	Brown spots with yellow halo (early) or dark water-soaked lesions spreading fast (late); starts on lower leaves; moves up	Tomatoes, potatoes	Cool wet weather; infected soil; overhead watering; poor airflow	Remove infected leaves immediately · Copper fungicide spray · Water at base only · Avoid reusing soil for tomatoes	
<b>Root Rot</b>	Wilting despite wet soil; yellowing leaves; stems soft/brown at base; roots brown and mushy (not white)	All plants — especially overwatered ones	Overwatering; poor drainage; compacted soil; no drainage holes	Remove from container · Trim rotted roots · Repot in fresh dry mix · Reduce watering frequency · Often fatal if severe	
<b>Damping Off</b>	Seedlings collapse at soil level; stem pinches to a thin thread at base; happens suddenly in germination trays	All seedlings	Overwatering; poor drainage; reused soil; cool conditions	Use sterile seed-starting mix · Improve drainage · Allow surface to dry between waterings · Increase air circulation	
<b>Downy Mildew</b>	Yellow patches on upper leaf surface; grayish-purple fuzzy growth underneath; spreads rapidly in wet weather	Cucumbers, basil, lettuce, spinach	Cool, wet, humid conditions; overhead watering	Remove and bag affected leaves · Copper fungicide · Water in morning · Improve spacing · Often fatal to basil	

### ⊞ BACTERIAL & VIRAL DISEASES

⊞ Bacterial Diseases			BACTERIAL
DISEASE	SIGNS	ACTION	
<b>Bacterial Canker</b>	Sunken lesions on stems; halo spots on leaves; oozing in humid conditions. Tomatoes mainly.	Remove affected stems. No cure. Discard heavily infected plants. Clean tools with alcohol.	
<b>Bacterial Wilt</b>	Sudden wilting of single stems or whole plant; slimy white threads visible when stem is cut	No treatment. Remove immediately. Spread by cucumber beetles. Control beetle population.	
<b>Fire Blight</b>	"Burned" appearance on shoot tips; brown-black blighted stems; affects pears and apples	Prune 12" below infection. Sterilize shears between cuts. No spray cure.	

↓ Viral Diseases			VIRAL
DISEASE	SIGNS	ACTION	
<b>Mosaic Virus (TMV, CMV)</b>	Mottled yellow-green mosaic pattern on leaves; distorted growth; stunted plants; no powdery coating	No cure. Remove and bag immediately. Do not compost. Control aphids (main vector). Clean hands before handling plants.	
<b>Tomato Spotted Wilt</b>	Bronze or purple ring spots on leaves; streaking on stems; deformed fruit; spread by thrips	No cure. Remove plant. Control thrips. Grow resistant varieties.	
<b>Cucumber Mosaic</b>	Yellow mottling, leaf distortion, stunted growth in cucumbers, squash, peppers, tomatoes	Remove infected plants. Control aphids aggressively. Buy certified disease-free seed.	

#### ↑ Disease Prevention — The Real Fix

- ↑ Water at the base, not overhead — wet leaves = disease invitation
- ↑ Water in morning so foliage dries before nightfall
- ↑ Space containers for airflow — touching plants spread disease
- ↑ Remove dead or yellowing leaves promptly — don't let them fall into soil
- ↑ Use fresh potting mix for new seasons; refresh or replace old mix
- ↑ Sanitize tools with 10% bleach or rubbing alcohol between plants
- ↑ Buy disease-resistant varieties whenever possible (look for V, F, N, T, A letters after tomato variety names)

#### 🔍 Quick Diagnosis — Ask These 3 Questions

##### 1. Where is the damage?

Leaves = surface pest or fungus · Stems = borer or disease · Roots = overwatering or root rot

##### 2. Is there a pattern?

Spots with halos = fungal/bacterial · Mottled color = viral · Uniform yellowing = nutrient deficiency, not disease

##### 3. What's the weather been like?

Hot & dry = spider mites, powdery mildew · Cool & wet = blight, downy mildew, root rot

#### ✗ When to Give Up on a Plant

- ✗ Viral disease — no cure, remove immediately before aphids spread it
- ✗ Severe root rot where more than half the roots are gone
- ✗ Bacterial wilt — the whole plant within hours of wilting
- ✗ When one sick plant is threatening healthy neighbors — sacrifice the one to save the rest