Tell a Pest Problem From Dust or Old Damage

Steadleaf Press



A practical growing guide with observation tools and original planning examples.

A pale speck, brown patch or fuzzy area deserves a closer look before treatment. Ask three questions: is it material sitting on the leaf, a normal part of the plant, or damage within the tissue? Then look for evidence that something is active now.

Dry, dead leaf tissue will not heal back to green. Its continued presence is not evidence that a treatment has failed or a pest is still feeding. Use dated photographs and new observations to distinguish an old mark from a developing problem. Scorched areas, for example, remain damaged even when the plant survives and produces healthy growth. South Dakota State University Extension, Leaf Scorch and Sunscald

Inspect before cleaning

Choose a well-lit place and support the plant securely. Have a hand lens, plain paper and a camera or phone ready. Do not begin by polishing the whole plant; that can remove evidence before you understand it.

Take three photographs:

1. The whole plant, showing which leaves are affected.

2. A close view of one marked area.

3. The underside of that same leaf, with its position on the plant recorded.

Look at a newer leaf and an older one as well. Note whether the mark appears on exposed upper surfaces, protected undersides, leaf joints or the entire plant. Inspect stems and crevices too. A leaf surface can be dusty while a separate pest problem is present underneath it.

Record recent events: cleaning nearby, building work, splashed water, a move into stronger sun, cold exposure or a previous treatment. These are clues to investigate, not proof of a cause. RHS guidance lists several environmental causes of houseplant spots and discoloration as well as pests and disease. RHS, Leaf damage on houseplants

Use the leaf inspection comparison chart

Use the chart to decide what to inspect next. A visual resemblance should remain a working possibility until supported by further evidence.

What you see	Possibility to consider	Useful next check	What not to assume
A loose dull film over exposed leaves	Ordinary dust	Photograph first, then gently clean a small suitable area with plain water. Iowa State	Dust on top does not exclude pests underneath.
White crystalline material on leaves, mix or pot	Mineral or fertiliser residue	Review the water and fertiliser history and compare deposits on different surfaces. Maryland Extension	Every white patch is not an insect or fungus; appearance alone does not identify the substance.
A dry brown patch, tear or scar that is part of the leaf	Old physical or physiological damage	Compare its boundaries with a dated photograph and inspect nearby healthy tissue.	A persistent scar does not prove continued feeding.
Fine pale stippling, sometimes with fine webbing	Spider-mite feeding	Use magnification beneath leaves to look for the mites themselves. Maryland Extension	One web or a few pale dots do not establish mites.
Silvery scarring with tiny dark spots	Possible thrips feeding	Search for slender insects and compare them with an identification guide. RHS	Scratches and silvery marks alone do not confirm thrips.
Cottony wax gathered near joints or on stems	Possible mealybugs	Look for the insect bodies and inspect sheltered parts of the plant. Maryland Extension	A loose fibre or every fuzzy patch is not a mealybug.
Raised shell-like bumps on stems or leaf undersides	Possible scale insects	Compare shapes and positions with a reliable reference for scale and for the plant itself. RHS	A stationary bump is not automatically a pest.
Brown spore-bearing clusters on a fern	Normal reproductive structures, called sori	Identify the fern and compare its normal fertile fronds. Iowa State	Normal spore structures do not exclude a separate infestation elsewhere.
A white or grey surface growth that is unfamiliar	Possible fungal growth or another coating	Keep photographs and seek identification, especially if it spreads. Powdery mildew grows on the surface. UC IPM	Material that wipes away is not necessarily harmless dust.

Natural hairs and patterned leaf colouring also need to be recognised before cleaning or treatment. Check the exact species and cultivar against a reliable plant reference. Do not rub an unfamiliar coating off simply to see what happens.

Clean only when cleaning is appropriate

For an identified plant with sturdy, smooth leaves, support a leaf from underneath and use a soft cloth lightly dampened with plain water on a small area. Stop if the surface seems delicate or is being damaged. Use clean materials so you do not carry debris from one plant to another.

Iowa State recommends damp, soft materials for cleaning large-leaved houseplants and warns that household detergents can damage leaf surfaces. Its guidance also distinguishes the care of fuzzy-leaved plants. Iowa State University Extension, Cleaning houseplants

For fuzzy, unusually coated or fragile leaves, check plant-specific guidance first. Skip improvised soap, alcohol, oil or leaf-shine mixtures. Do not use forceful scraping as an identification method.

Write down what happened: “Loose grey material transferred to the cloth; the green surface below remained intact.” That supports a surface-deposit explanation. It does not establish the identity of every remaining speck or replace inspection of the underside.

If you have already cleaned the plant, say so when asking for help. A photograph taken afterwards may show something different from the original concern.

Track change on the same leaf

Give the leaf a simple description such as “third mature leaf on the left-hand stem,” and mark its position on the whole-plant photograph. Use that photograph to find it again; counting from the top can select a different leaf after new growth appears. Label the photograph rather than writing on the leaf. Include a familiar size reference beside the leaf without pressing it against the tissue.

At the next check, use similar lighting and angle. Compare the same boundaries. A shadow, brighter exposure or a closer photograph can make an unchanged patch look larger or darker.

Use this record:

- Plant and leaf location:

- Date first noticed:

- Surface material, normal structure, tissue damage or uncertain:

- Size and position of the marked area:

- Insects, mites, eggs, wax or webbing actually observed:

- Underside and leaf joints checked:

- Cleaning or care changes made:

- Photo names and dates:

- What is genuinely new at the next check:

- Next inspection date, action and reason; signs that would prompt earlier help:

Separate “newly noticed” from “new since the last check.” A spot on an underside you did not inspect before has an unknown starting date. A patch extending beyond its photographed boundary or a mark appearing on a previously clear, photographed leaf is stronger evidence of change. Record clearly observed pests even if you cannot tell when they arrived. The same old dry edge looking untidy is not new damage.

Check developing leaves as well, without demanding immediate growth from a slow or resting plant. A quiet inspection is reassuring evidence, not a guarantee that no pest is present.

Work through a mixed finding

Imagine a smooth-leaved houseplant with a pale surface film and one brown patch. This is an illustrative inspection, not a report of a plant we have tested.

The owner photographs both features separately. After a small, gentle clean, the loose film lifts away. The brown patch stays because it is part of the leaf. They record the cleaning and keep a photograph that clearly shows the patch boundary.

They inspect the underside, joints and nearby leaves. If they see no pest, they record which parts were checked and whether a hand lens was used, rather than writing “pest-free.” They review recent care and set a follow-up date, rather than spraying because the old patch remains visible. Rapid spreading damage, wilting or softening calls for earlier assessment.

At a later check, there are several possible paths:

- If the patch is unchanged and no new signs appear, continue appropriate care and ordinary observation.

- If the patch enlarges or new leaves develop similar damage, investigate the ongoing cause.

- If identifiable insects or mites appear, use pest-specific guidance.

- If unfamiliar powdery growth develops, seek identification rather than calling it dust because the first film wiped away.

More than one explanation may be correct. Cleaning dust does not explain a scar, and identifying a scar does not settle the condition of every other leaf.

Know when a closer assessment is worthwhile

Seek help when damage spreads quickly, the plant wilts despite apparently suitable care, a stem or crown softens, or the evidence remains ambiguous. Send the whole-plant view as well as the close-up, the plant's identity if known, and the record of recent changes.

Keep a plant with a suspected transmissible problem apart while the cause is assessed. Do not diagnose a particular pathogen from colour, a halo or a soft spot alone. Likewise, do not assume that a plant without visible insects needs a fungicide.

The next useful step may be identification, a care adjustment, careful cleaning or simply documenting an old mark. Treatment follows the evidence; it does not replace it.

Sources and scope

- South Dakota State University Extension, Leaf Scorch and Sunscald: permanent injury to scorched tissue.

- RHS, Leaf damage on houseplants, Thrips and Scale insects: alternative causes and pest clues.

- Iowa State, Cleaning houseplants and Growing Ferns from Spores: surface care and natural fern structures.

- Maryland Extension, Mineral deposits, Mealybugs and Indoor plant problems: residue and pest comparisons.

- UC IPM, Houseplant Problems: surface fungal growth.

Sources checked 4 November 2026. The comparison chart, observation record and scenario are original. They are inspection aids, not an image-based diagnosis, pesticide prescription or guarantee of pest absence.