



Good things start in the soil

The soil & compost field guide



Three materials. Three different jobs.

The labels can sound interchangeable. They are not. Identify the growing space before deciding what belongs in it.



Illustrated examples. Appearance cannot establish quality, safety or suitability.

Garden soil

Mineral soil is the starting point for an in-ground garden. Improve it for a reason, guided by observations and appropriate testing. [1]

Compost

An amendment that adds organic matter and nutrients. It is not automatically a complete growing medium or a harmless extra. [1,2]

Potting medium

Designed for container conditions. Match it to the planter and crop; don't automatically substitute dense garden soil. [4,5]

THE FIRST QUESTION Am I improving existing soil, filling an open-bottom bed, or planting a container? Each calls for a different conversation.

Look before you add anything.

Wilting, yellow leaves and slow growth are clues, not diagnoses. Start with an observation that will change your next decision.

A dry surface can hide moist soil.

Check a few inches below the surface where roots are growing. Note whether moisture is even across the bed and how the bed behaves after watering or rain. Avoid watering solely by the calendar. [6]

If only one corner is struggling...

Compare the water reaching that corner, its shade, drainage and plant condition with the rest of the bed. A local pattern is a useful lead.

If the whole bed is slow...

Record weather, crop stage, watering and recent additions. If pH or nutrient questions remain, use a suitable lab test and local interpretation.

If the surface is wet for a long time...

Investigate drainage and watering before adding another product. Compost is not a universal solution to a persistently wet root zone.

Keep a dated photo and a short note. Several observations are more useful than one worried snapshot of a leaf.

Good compost. Right amount. Right job.

“More” is not a soil-improvement strategy. Compost contributes nutrients as well as organic matter, and those inputs can accumulate. [1,2]

ASK ABOUT

WHY IT MATTERS

What it was made from

Yard materials, food scraps, manure and blends have different characteristics. Manure-based products can contribute substantial nutrients and salts. [1,2]

How readiness is assessed

Dark, crumbly and earthy-smelling are useful observations, not proof of maturity or suitability. Ask how the supplier evaluates the exact product. [2,3]

What the analysis says

Mature compost can still have high soluble salts. Ask about nutrients, salts and use recommendations, not just whether it is “finished.” [3]

A better buying question

“What will this product improve in my bed, and how much is appropriate given the soil or media I already have?”

Avoid a fixed annual compost habit when nutrients or salts are already high. Ask your lab or extension service how to proceed. [1,2]

Make the report earn its keep.

Ask the lab which test and sampling method fit your growing space. Container media may require a different test from mineral soil.

Before you sample

Follow the lab's sampling depth and collection instructions. Keep distinct areas separate when soil or management differs. Tell the lab the crop and recent additions. [1]

When results arrive

Read the units and crop-specific recommendations. A nutrient number alone is not an application rate. Ask before converting a recommendation to your bed's area.

THE SUPPLIER CONVERSATION

- 01 What is in this exact product or batch?
- 02 Is it intended for my bed type and intended crops?
- 03 Is analysis available for nutrients, salts and maturity?
- 04 What rate or blend suits this use, and what supports that advice?
- 05 What are the delivered price, minimum order and volume?

Read the scope of the test.

A routine fertility report may not include soluble salts or contaminants. Ask specifically when those are relevant. Appearance and a reassuring product name cannot answer those questions.

One change. Something learned.

Keep the record small enough to use. Compare similar plants or areas when practical, and note weather and watering as well as the product you added.

Question, area and conditions before the change

Product, exact amount, area and date (or change to watering)

Follow-up date, weather, observations and next step

One comparison does not prove a universal rule. Weather, plants and pests vary. Use your notes to decide what to check next.

READ FURTHER

[1] USU · Preparing and Improving Garden Soil

[2] CSU · Choosing a Soil Amendment

[3] OSU · Interpreting compost analyses

[4] UMN · Raised bed gardens

[5] USU · Raised Bed Gardening

[6] USU · Maintaining a Water-wise Landscape

Companion raised-bed guide: bestgardenchannel.com/bed-planning-kit

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