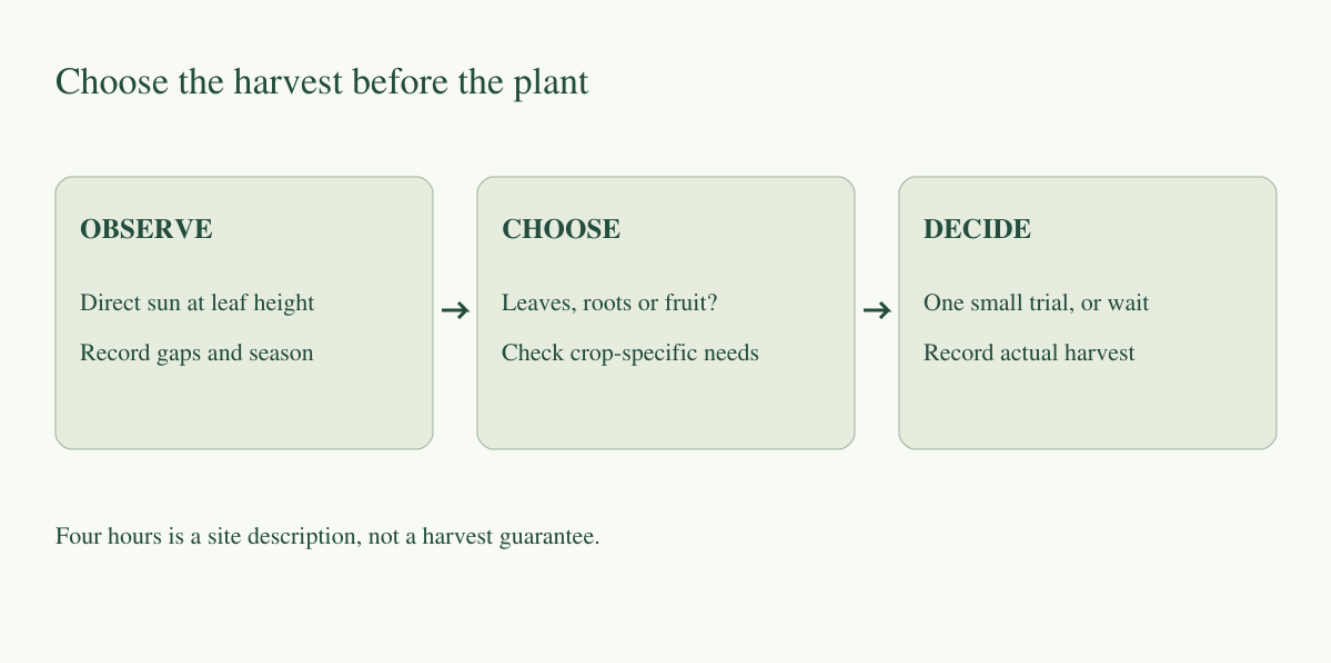
Choose Edible Crops for a Four-Hour-Sun Site

Choose a harvest you can reasonably try, rather than a plant you must persuade to fit.



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

A pot can look green and still produce very little of the food you hoped to pick. A tomato plant with leaves is not yet a tomato harvest. At a position receiving roughly four hours of direct sun, that distinction belongs on your shopping list, before the plant goes into the pot.

This guide helps you choose one outdoor edible-crop trial, or decide to wait. Its result is a short statement: **I want to harvest ____. At this position, my best-supported candidate is ____, provided ____; I will reconsider if ____.** It is not a growing calendar or a promise that four hours will produce a particular yield.

1. Check what the four hours describe

Use the position where the crop's leaves would actually be, not a sunny patch elsewhere on the balcony. Record the date, the direct-sun periods you observed, and any gaps you did not observe. If you saw sunlight at ten and again at two, you have two observations, not proof of four continuous hours.

A simple check is enough to start:

- Position and intended leaf height: ____

- Date and weather: ____

- Direct sun observed from ____ to ____; other observed interval ____

- Unobserved periods: ____

- Main obstruction: building / tree / overhang / other ____

- Does the proposed growing season differ from the observation season? ____

Do not look directly at the sun. Note its effect on the growing position instead. When the start or end is unknown, write “duration uncertain” and observe again rather than rounding upward.

Four hours is a rough description, not a measured light dose. RHS defines partial shade in terms of three to six hours of direct sun at midsummer and notes that midday sunshine supplies more light than morning or evening sunshine. Tree cover and buildings also create different shade conditions. A November observation is not a midsummer forecast, or the reverse. [1]

This guide's shortlist concerns outdoor partial sun. Do not automatically transfer it to a dim indoor shelf because a window faces the same direction.

2. Decide which part you want to eat

At limited-light sites, a leaf harvest is generally a more promising aim than a fruit harvest. Iowa State identifies leafy crops as better candidates for partial shade than crops that must flower and set fruit, and warns that production may take longer in suboptimal light. [2]

The advice is not a single agreed numerical boundary. Iowa State's FAQ includes several leafy vegetables at three to four hours; Maryland gives three to five hours for cool-season crops such as lettuce and spinach. Rutgers uses four to five hours for leafy crops, five to six for roots, and at least eight for fruiting vegetables. These are planning guides, not contradictory guarantees about your particular pot. [3,4,5]

Treat a four-hour site as a reason to narrow the trial, not to select every crop described somewhere as “shade tolerant.”

The light-and-harvest expectation matrix

The decisions below are this guide's conservative starting choices, not a reproduced university ranking. Check the cultivar and local season before buying.

Candidate	Harvest you are choosing	Decision at roughly four observed hours	What not to assume
Loose-leaf lettuce	Edible leaves	A reasonable first candidate when the season and container suit it. [3,4]	A head-sized harvest, repeated picking forever, or a fixed completion date.
Spinach	Edible leaves	Another candidate to investigate against local seasonal guidance. [3,4]	That a suitable light reading also means suitable temperature.
Swiss chard or kale	Edible leaves	Consider one named variety if its mature size fits the space. Both appear in Iowa State's partial-shade advice. [3]	That buying a small seedling means the mature plant needs little room.
Radish for its swollen root	Roots, not merely visible foliage	A conditional experiment, not the first choice for a dependable root harvest here. Iowa State lists it as a partial-shade possibility; Rutgers gives root crops a higher light allowance. [3,5]	That healthy-looking leaves prove a useful root is forming.
Tomato, pepper or squash	Fruit	Seek a sunnier suitable position rather than making this the first four-hour trial. Maryland gives these warm-season crops six to eight hours of direct sun. [4]	That fertilizer, a large pot or the word “compact” removes the light limitation.

Choose something you actually intend to use. If you only want tomatoes, it is reasonable to decline this location rather than grow unwanted lettuce simply to fill it.

3. Give the candidate three more tests

Season. Find the named crop's local sowing or planting guidance. Do not import the months from a different climate. If the packet and local guidance do not support starting now, write a later assessment date. A few hours of shade are not a universal remedy for an unsuitable season.

Room. Check the variety's recommended container dimensions, final spacing and mature spread. This selection sheet deliberately supplies no universal pot depth: the crop you choose determines that requirement. Plan for drainage and ordinary access without blocking a doorway or balancing a pot on an improvised support. Obtain appropriate building guidance if the suitability of a balcony or loaded support is uncertain; this guide does not assess loads.

Care you can actually provide. Decide how you will reach the pot with water and inspect it. Maryland highlights both water access and heat released by surrounding hard surfaces as site considerations. A partially shaded pot beside hot paving is not necessarily a cool growing place. [4]

A failed test is useful information. Change the candidate, change the position safely, or postpone. Do not erase an unresolved test by calling the plant an experiment.

4. Make one modest commitment

Avoid buying five crops to discover whether the site works. Select one candidate and write what would count as a useful result for you: for example, a small picking of sound leaves, rather than enough vegetables for a household.

Keep the expected harvest and the observed harvest in different boxes. A seed packet's maturity estimate belongs with your planning notes; it is not a date on which the crop owes you food. If nothing has been picked, record “none yet,” not the amount you hope to obtain.

Decision record	Your entry
Named crop and variety	____
Part I intend to harvest	____
Light evidence, date and remaining uncertainty	____
Local seasonal guidance checked	____
Container and final spacing requirement checked	____
My useful small-trial result	____
Actual sowing or planting date, if any	____
Review date I chose	____
Actual harvest so far	____
Next decision and its reason	____

At the review, compare the plant with its own earlier condition. Ask whether new usable growth is appearing, whether leaves are crowded, and whether the light pattern has changed. A lack of harvest is not automatically proof of insufficient sun: inspect the other conditions and consult crop-specific advice before changing treatment. Keep a record of what you changed so the next observation has a clear context.

5. Two choices that both count as progress

Fictional example: a leaf trial. Amira has observed the same outdoor position through several clear days in the current growing season. She wants salad leaves, has a suitable draining pot, and finds local guidance supporting a loose-leaf lettuce sowing now. Her record says “try one small sowing,” with no promised harvest weight. When she next checks, the plants are still small. She records their stage and leaves the harvest box at “none yet.” She has information, not a failed deadline.

Fictional example: declining the site. Daniel wants ripe peppers. His four-hour estimate comes from a single morning and an afternoon glance; part of the interval is unknown. He also has no suitable place for the mature container. He does not buy a pepper and hope that extra feed will settle both questions. His next action is to investigate another accessible position. If none is suitable, he does not start this crop.

Neither example reports a growing trial. They illustrate how to keep a preference, evidence and a decision separate.

6. Keep the boundary clear

This is a crop-selection guide, not a declaration that anything grown in a pot is safe to eat. Use positively identified edible seed or plants and suitable growing materials. Before harvesting, follow the crop's handling guidance and any applicable pesticide-label restrictions. Light suitability does not establish food safety.

Your completed result may be one promising leaf crop, a clearly labelled uncertain root trial, or a decision not to plant. The useful change is that you know which harvest you are testing and which question remains open.

Sources and scope

Primary pages opened on 18 November 2026:

[1] Royal Horticultural Society, *Shade gardening*. Definitions, time-of-day differences and kinds of shade. https://www.rhs.org.uk/garden-design/shade-gardening

[2] Iowa State University Extension and Outreach, *Growing Edible Plants in Shady Areas*. Relative suitability of leaf harvests and slower production under limited light. https://yardandgarden.extension.iastate.edu/how-to/growing-edible-plants-shady-areas

[3] Iowa State University Extension and Outreach, *Which vegetables will grow in partial shade?* Candidate crops and its three-to-four-hour leafy-crop guidance. https://yardandgarden.extension.iastate.edu/faq/which-vegetables-will-grow-partial-shade

[4] University of Maryland Extension, *Growing Vegetables in Containers and Salad Tables*. Crop-group light ranges, water access and surrounding heat. https://extension.umd.edu/resource/growing-vegetables-containers-and-salad-tables

[5] Rutgers Cooperative Extension, *Planning a Vegetable Garden*, FS129. Its separate planning ranges for leafy, root and fruiting crops. https://extension.rutgers.edu/fs129

The matrix, record sheet and examples are original editorial tools, not calibrated light measurements or reported crop trials. No yield, physical growing test, structural assessment or universal planting season is claimed. No third-party illustration is reproduced.