

# Hoop houses provide snug home for veggies but require an inside touch

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A high tunnel (HT) or hoop house extends the growing season.

An HT and a hoop house are non-permanent, unheated greenhouse structures typically covered with plastic. They have a different set of growing rules than growing outside.

Using an HT or hoop house allows growers to start as early as February or March and go as late as December. They can also accelerate the growing season and provide protection from wind and hail.

There are many kits or DIY online instructions for HT. Before getting a HT, consider how big it needs to be, what needs to be grown and if it will get enough sunlight. Water and soil quality, wind and snow loads, covering material and growing methods should also be taken into consideration.

## Holistic approach

What works in an outside garden can be very damaging inside a high tunnel. Regardless of growing directly in the soil, raised benches, or containers, a holistic approach to soil and water management will work best. Develop a fertilizer plan with low nitrogen inputs of around 10 percent nitrogen, and keep records of when fertilizer is added.

The soil in a high tunnel heats up quicker, causing organic matter to decompose faster compared to outside garden soil. Adding organic matter, like grass clippings, leaves, old hay, etc., back to the soil is important at the end of the season. Do not work

manures directly into the soil as they may raise the soil salt levels and cause irreversible soil damage.

## Temperature, humidity levels important

Keeping temperatures below 95 degrees is important so pollen will not decrease in viability. Pollen may even stick together if the humidity is too high. Pollinators are needed for first blooms. Some of the best pollinators are sweat, mason, and alkali bees, bee flies, bumblebees and honey bees.

Pollinating insects are susceptible to insecticides, including Neem Oil. The best approach is careful use of fertilizers, improved airflow and reduced humidity.



**Strawberry plants grow inside a hoop house at the student ACRES Farm near the University of Wyoming campus.**

## GENERAL RULES

- Increase air circulation,
- Decrease humidity,
- Never use overhead watering systems,
- Sanitation is everything,
- Not all fertilizers work in a high tunnel, and
- Never use manures.

Trap crops can be planted to help reduce insect pressures, like mustards, buckwheat and collards.

Watering in a high tunnel should be kept on the ground with soaker hoses or drip tape. Keeping the plants on the dry side and humidity as low as possible is better. Excess humidity breeds insect and disease problems. A drier greenhouse will result in healthier plants. Best time to water is late morning to early afternoon. This helps prevent tomato cracks and splitting problems.

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