



HOW TO CONSTRUCT A LOW TUNNEL

As adapted from Eliot Coleman's "quick hoops" design

Build your own low tunnel for as little as \$50, using 10-foot lengths of 1/2-inch PVC conduit, Agribon, and/or clear plastic! More pictures and details are available at www.motherofahubbard.com.

1. Prepare a 5-6 ft wide raised garden bed by rototilling or, more preferably, aerating and loosening the soil with a spading fork (to avoid bringing weed seeds to the surface).
Tips: Plant the bed first, so that you don't have to work around the planting as you construct the tunnel. Grow taller plants, like swiss chard or fava beans, in center rows, and shorter plants like lettuces near the border.
2. Using a stud bar, drive a 12-inch deep hole into the ground at the corner of the bed. Create another 12-inch deep hole at the opposite side of the bed.
Alternatively, drive an 18-inch length of rebar (or other small-diameter stake) into the ground at a 12-inch depth.
3. Insert one end of a 10 foot length of 1/2-inch PVC conduit into hole (or over the rebar if used). Insert the other end of the PVC conduit into the opposite hole, creating a hoop over the bed. Avoid stepping on the prepared beds.
You can find pre-cut 10-foot lengths of PVC conduit at your local home and garden store. Presently, these cost less than \$2.00 each.
4. Repeat the process of constructing hoops every 5 feet down the length of the bed.
5. Unroll a 10-foot wide cover of your choice along the length of the bed.
Agribon is a quality fabric row cover that affords varying degrees of frost protection based on weight (Agribon-19 is recommended, providing frost protection down to 28 °F). When temperatures start dropping significantly (usually in late December here in hardiness zone 6b), add an additional layer of clear plastic (either greenhouse grade or 6-mil construction grade, the latter being less expensive but less durable for successive use).
6. Pull the cover over the bed. At the longest ends of the bed, gather the cover and cinch it tightly with a durable rope (such as woven clothesline). Tie the other end of the rope to a secure stake. Repeat on the other end of the bed, pulling the cover taut.
7. Drive a stake into the ground at the base of every other hoop on one side of the bed. Do the same on the other side of the bed, but at the base of hoops that were "skipped" on the opposite side. Tie durable rope or masonry line to a corner stake. Take the line across the cover to the stake at the base of the next hoop. Loop the line around the hoop a few times, and then repeat to the other side. You'll end up with line zig-zagging across the cover, securing it to the hoops and the ground.
8. Secure the edges of the cover with weights. If you don't plan on accessing the tunnel frequently, consider burying the edges with your garden soil.
Inexpensive weights include sandbags, repurposed feedbags filled with gravel, recycled plastic jugs filled with water, and scrap building or fencing materials.
9. Vent plastic tunnels when necessary by sliding cover up the hoops and securing at the center with spring clamps or rope ties. A sudden warm spell in late fall or early spring can cook plants in plastic tunnels (*which can easily reach 80 °F on a sunny day when outdoor temperatures are only in the 40s*), so use a remote thermometer to keep an eye on the temperature in the tunnels until you get the hang of it. Agribon covers are permeable to air and water and do not require venting.