



# Low Tunnel Systems:

## Extending Your Growing Season & Protecting Crops

### WHAT ARE LOW TUNNELS?

Low tunnel systems are enclosed structures typically covered with polyethylene, polycarbonate, plastic, or fabric. They are designed to protect crops from harsh weather conditions like sun, wind, excessive rainfall, or cold, and to extend the growing season or reduce pest pressure. These systems are less than 4 feet tall at their peak.



### TYPES OF COVERS:



Plastic Covering



Hail Netting



Insect Netting



Frost Cloth

### WHY USE LOW TUNNELS?

- Improve plant productivity and health
- Reduce plant pest pressure
- Extend the growing season
- Protect from sun or wind intensity, and frost

### KEY FEATURES & CONSIDERATIONS:

#### Cover Materials & Protection:

- Plastic/Polyethylene Covers (for Season Extension):
  - Minimum 4 mil greenhouse-grade material is recommended and may require ventilation during heat of the day.
  - Ensure plants do not directly contact the cover when using polyethylene.
- Shade Cloth (for Sun Protection):
  - Apply appropriate shade cloth (10%-60%) based on crops, climate, and site conditions.
  - Leave airspace between the fabric and plants for improved air circulation and to keep plants cooler
- Insect Netting (for Pest Reduction):
  - Utilize fine mesh pest netting to protect plants from insect damage during critical periods.
- Frost Cloth (for Season Extension):
  - Used for early season extension during colder temperatures
    - Heavy (1.5-2.2 oz/yd<sup>2</sup>): Provides 8° F of protection, below freezing, best for overwintering
    - Medium (0.5-1.0 oz/yd<sup>2</sup>): Offers 4-6°F of protection below freezing, suitable for spring/fall crops and overwintering.

#### Pollination

- Remove or roll up cover sides at appropriate times to facilitate pollination.