

GROW & GIVE

MODERN VICTORY GARDEN PROJECT

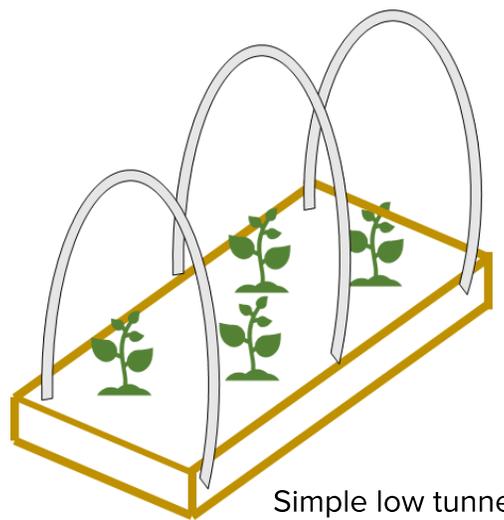
Season Extension

Benefits of different season extension materials for growing vegetable gardens

Season extension techniques play an important role in crop production throughout Colorado. On average we have 80-120 days in our season, often not long enough to get reliable crop set. Utilizing a combination of proven season extension techniques and adapted plant varieties will allow gardeners to become more food secure and increase the potential for additional income by selling produce.

In 2011-2020, San Miguel county in partnership with Teller and Eagle counties began annual vegetable trials comparing yield and quality growing under different season extension covers in low tunnels. For more details on the trials including crops grown contact San Miguel county.

Most season extension methods rely on heating the air and soil under a cover during the day which will help retain some of that heat, especially heat radiated by warm soil at night. There are many options but some of the most common and available are low tunnels (see diagram) and cold frames (see picture). Cold frames can be purchased as kits or built as a DIY. Low tunnels are often best built on a raised bed frame using rebar and PVC pipes or wooden structures depending on selected materials.



Cold Frame



Multiple low tunnel materials

Growing Under:

Flexible Polyethylene (\$\$\$)

5 mm recommended over 3.5 mm for durability.
Has given an earlier start and usually the first harvest for cool-season crops

PROS:
Most durable material, conserves water, excludes insect pests.

CONS:
Reduces light - plants may stretch. Humidity is high so disease pressures may be high.

30% Row Cover Fabric (\$)

Easiest to find. Usually increases yields of all types of crops compared to no cover

PROS:
Inexpensive, easy to install, provides shading in summer
Allows air circulation and some rain to pass through

CONS:
It doesn't last as long as other choices. Limited protection against cold

PVA film (\$\$)

PVA is a breathable synthetic film the brand used in the trial was DIO-Betalon

PROS:
Best light transmission, Warmer than row cover fabric, lower disease. Quite durable

CONS:
More difficult to find, allow for 5% shrinkage after installation

NO COVER (Free)

Some cool season crops grow well without cover in high-altitude, cool-season areas

PROS:
No expense or maintenance for covers

CONS:
Benefits of covers are lost: early planting and harvest, pest exclusion, etc.)



Flexible Polyethylene



Row Cover Fabric



PVA Film



Possible additional heat protection from C4 incandescent holiday lights.