



Growing Upwards: Trellising Peppers and Eggplants in Tunnels

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GROWING PEPPERS AND EGGPLANTS in tunnels has the potential to diversify early summer crop offerings and improve fruit yield and quality compared to field production. The greenhouse industry in many other parts of the world have been cultivating eggplant and peppers in protected culture for decades, but adoption has been slow in the U.S., especially among small scale growers here in the



Photo Credit: Cheryl Frank Sullivan

Northeast, where the majority of tunnels are unheated. However, in the past decade, greenhouse specific varieties have become available through seed companies that sell to market gardeners, opening up new opportunities for growers eager to improve tunnel pepper and eggplant production.

There is an overall lack of information available to growers about cultivating high tunnel vegetables, and in particular, pepper and eggplant cultivation in unheated tunnels. Thankfully, Dr. Becky Sideman and other colleagues at UNH (including high tunnel team member, Heather Bryant) have been tackling these questions for the past few years. Over a three-year trial comparing greenhouse bell pepper varieties with field cultivars, they found that the high-tech cultivars produced significantly higher marketable yield than field varieties, with better plant vigor and crop quality (Sideman, 2020). However, research examining high tunnel eggplant, led to a different set of conclusions: in their two-year trial, field varieties performed as well as greenhouse varieties. They also found that pruning eggplant in unheated tunnels did not improve yield (Sideman et al., 2024). Read more about their findings [here](#).

The UNH team also explored pruning and trellising systems in their research, making the important distinction that in unheated tunnels, some labor investments do not pay off in the long run (for example, pruning and trellising eggplant). However, these varieties are still quite new to our region, so growers continue to explore and modify techniques. Described below are a few recommended trellising systems that can be used for peppers and eggplant.

If you are a grower looking to try something new, test out some new varieties and systems — let us know how it goes!



Photo Credit: Cheryl Frank Sullivan

Trellising to Overhead Lines

THIS METHOD IS BEST suited to hybrid greenhouse varieties that will produce for a long season, ideally in a heated greenhouse. Peppers and eggplant can be pruned to 2–4 main leaders and either gently twisted around twine or clipped to it. These can be planted in two rows per bed with two parallel wires over the bed. Stems should be about 6 inches from each other. Vegetative “suckers” are pruned off peppers and eggplant as with tomatoes; however, for eggplant, let the suckers develop and cut off the shoot right above the flower cluster.

Basket Weave

THIS METHOD IS BEST suited to bells or other heavy fruited peppers or large eggplant varieties grown in unheated tunnels to prevent lodging. A good description of basket weaving can be found at Johnny’s Seeds Growers’ Library. This method is fairly quick to maintain, but be careful not to squish immature pepper fruit between lines of twine.

Hortonova Netting

THIS SYSTEM IS suitable for small-fruited peppers like lunchbox, shishito, or hot peppers. It is set up with two lines of square Hortonova netting stretched vertically on either side of the pepper plants. This allows the plants to stay contained, but doesn’t squish the fruit, requires little maintenance once it is set up, and allows for easy picking.

ALL OF THESE SYSTEMS require expenses and time. We’d love to hear from you — what have you tried for peppers and eggplant? What varieties do you grow? Send your feedback to rebecca.maden@uvm.edu.



Photo Credit: Cheryl Frank Sullivan

References

- Sideman, R. G., Bryant, H., & Saunders, O. (2024). Yields, Postharvest Storage, and Response to Pruning of Eggplant Cultivars Grown in High Tunnels in New Hampshire, USA. *HortTechnology*, 34(3), 331-338. Retrieved Jun 4, 2025: <https://journals.ashs.org/horttech/view/journals/horttech/34/3/article-p331.xml>
- Sideman, R. G. (2020). Colored Bell Pepper Yields from Cultivars Grown in High Tunnels in Northern New England. *HortTechnology hortte*, 30(3), 456-462. Retrieved Jun 4, 2025: <https://journals.ashs.org/horttech/view/journals/horttech/30/3/article-p456.xml>
- Johnny’s Selected Seeds (2024). Bell Pepper Greenhouse Production. <https://www.johnnyseeds.com/growers-library/vegetables/peppers/peppers-bell-greenhouse-production.html>
- Johnny’s Selected Seeds (2016). Greenhouse Eggplant Production. <https://www.johnnyseeds.com/growers-library/vegetables/eggplant/eggplant-greenhouse-production.html>
- Johnny’s Selected Seeds (2016). Basket-Weave Trellising Instructions. <https://www.johnnyseeds.com/growers-library/methods-tools-supplies/pruning-trellising/tomatoes-peppers-basket-weave-trellising-instructions.html>



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<https://go.uvm.edu/high-tunnel>