Grafting tomatoes protects plants, increases yields

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Grafting vegetables is a time-tested way for growers to protect plants from soil-borne diseases as well as potentially improve yields, according to a Texas A&M AgriLife Extension Service expert.

Grafting is the process of joining two plant varieties – the top portion, or scion, with a bottom portion, or rootstock – to grow as one.

Dr. Joe Masabni, AgriLife Extension small acreage vegetable specialist, Overton, has been performing grafting research over the past three years as part of a multi-regional Texas A&M AgriLife Research study in College Station, Lubbock, Uvalde, Weslaco and Overton. But he's been showing Texas Master Gardeners program members how to graft for almost a decade.

"The main benefit is that grafting allows growers to combat soil diseases without chemical sprays," he said. "But our studies have also shown improved yields and improved cold tolerance if you plant early."

Grafting is especially important for gardeners and growers who utilize the same land, whether it's a quarter-acre garden or 40-acre field, to grow the same vegetables year after year, Masabni said.

Tomatoes can also be grafted on other vegetables of the same family, he said. For example, a tomato scion can be grafted on an eggplant or potato rootstock to combat soil diseases.

Masabni said grafting helps gardeners and professional growers utilize characteristics of the hybrid tomatoes, such as disease resistance. Hybrid rootstocks with characteristics that promote more vigorous root growth also help the scion perform better.

"Heirloom tomatoes aren't resistant to soil diseases, so if you graft your favorite heirloom variety with a hybrid rootstock that is resistant to diseases and takes up nutrients and moisture more efficiently, then you're likely to see increased quality and yield from your plants," he said. "It's not magic, but it really is an easy and fun way to improve yields."

Provided by Texas A&M University

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