The new tomato plant has shortened stems so it grows faster and requires less space | Photo source Cold Spring Habor Laboratory

MODIFIED TOMATO GROWS ON SHRUBS TO BOLSTER URBAN FARMING

FOOD & DRINK

The genetically modified tomato ripens faster and requires less space than traditional vine tomatoes

Spotted: Researchers at US-based Cold Spring Habor Laboratory have developed a type of tomato that ripens more quickly than traditional vine-grown varieties. The new tomato plant has shortened stems so it grows faster and requires less space, a plus for urban farming.

The newly modified tomato is possible because the team discovered a gene, SIER, which controls the length of the stem.

The shorter stem is an important breakthrough because it allowed the team to speed up the growing process without sacrificing taste. It also means the tomato plant requires less space, an important criterion for urban farming and farming in space, the team said.

The new tomato also includes modified SELF PRUNING (SP) and SP5G genes. The tweaked genes allow the plant to flower and bear fruit sooner. The new tomato plants grow in a bunch, like roses, instead of on vines. They mature in under 40 days.

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Takeaway:

Vertical and rooftop farms can reduce the carbon footprint of food transportation. With more people moving to urban areas, the potential to grow food locally is attracting more attention. Union Bank of Switzerland estimates that food and agriculture innovation will be worth 623bn euro by 2030. Cold Spring Harbor Laboratory's research has the potential to be adapted to other plants, making it easier to diversify urban farms.