

Pepper Plant with Abscising Fruit and Petiole for Easy Harvest

Tech ID: 31886 / UC Case 2015-633-0

ABSTRACT

Researchers at the University of California, Davis have developed a pepper plant that abscises its pedicel easily during harvesting, also known as destemming or decapping.

FULL DESCRIPTION

The majority of green peppers grown commercially need to be harvested manually, an expensive and time-consuming option for growers. Manual picking is required because most peppers retain their pedicels upon harvest. Various, prior attempts to develop peppers that can be harvested mechanically while retaining their quality have not been productive.

Researchers at the University of California, Davis have developed a pepper plant that abscises its fruit from its petiole easily when being picked. This allows for efficient harvest by mechanical pickers, similar to tomato harvesting. The pepper trait is stably inherited from parent to progeny and seems, to be dominantly and simply inherited. Therefore, new varieties of pepper plants can be created through conventional breeding to other pepper plants by crossing and selecting phenotypically for the desired trait(s). This trait can also be used in research and breeding by linking it to molecular markers and using markers to track the trait during breeding. UC Davis has developed molecular markers for this trait.

APPLICATIONS

- ▶ Produces pepper varieties that can be harvested mechanically
- ▶ Can also be used in research and breeding

FEATURES/BENEFITS

- ▶ Allows for significant time and cost savings during harvest
- ▶ Offers researchers and breeders new avenues for additional variety development

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	11,744,220	09/05/2023	2015-633

Additional Patent Pending

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OTHER INFORMATION

KEYWORDS

Pepper, Capsicum,

Abscission, Mechanical

Harvesting, Phenotyping,

Destem

CATEGORIZED AS

- ▶ **Agriculture & Animal Science**
- ▶ Plant Traits

RELATED CASES

2015-633-0