Maize Germplasm for a Dominant Dwarfing Trait

A dominant dwarfing maize mutant, D16, can be used to breed short-statured corn, reducing losses from green snap and stalk lodging.

Researchers at Purdue University have generated a dominant dwarfing maize mutant in B73 maize inbred called mutant D16. D16 can be used as a source of germplasm to breed for short-statured corn, providing the advantages associated with shorter corn, including less green snap and stalk lodging. A D16 homozygote is approximately 50% of the height of normal B73 maize, with the heterozygote being 65-70% as tall as normal B73.

Advantages:

- -Shorter corn
- -Less green snap and stalk lodging

Potential Applications:

-Agriculture

Technology Validation:

A D16 homozygote is approximately 50% of the height of normal B73 maize, with the heterozygote being 65-70% as tall as B73.

TRL: 4

Intellectual Property:

Provisional-Patent, 2023-04-14, United States | PCT-Patent, 2024-04-12, WO | NATL-Patent, N/A, Mexico | NATL-Patent, N/A, China | NATL-Patent, N/A, India | NATL-Patent, N/A, United States | NATL-Patent, N/A, Europe | NATL-Patent, N/A, Canada | NATL-Patent, N/A, Brazil | NATL-Patent, N/A, Argentina

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Category

Agriculture, Nutrition, & AgTech/Crop Genetics & Breeding

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