



## Deregulated DHS and Tyra Enzymes Of Grasses Enable Efficient Production Of Both Tyrosine And Phenylalanine

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Inventors: Hiroshi Maeda, Jorge El Azaz Ciudad

### The Invention

UW-Madison researchers have identified a gene in grasses involved in upregulating the metabolic pathway that yields the aromatic acid tyrosine. When they move this gene into another plant species, they observe an increase in tyrosine concentration locally in the leaf where gene transformation occurred.

The inventors have identified a homolog of the DHS1b (3-deoxy-D-arabino-heptulosonate 7-phosphate 21 (DAHP) synthase 1b) gene in rice. They tested that gene along with the original gene from *Brachypodium* in a tobacco leaf. We don't know what impact, if any, this gene has on absorption of atmospheric carbon.

### Additional Information

#### For More Information About the Inventors

- [Hiroshi Maeda](#)

#### Tech Fields

- [Animals, Agriculture & Food : Animal biotech](#)

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