

Patent

PCT patent application WO 2016/172798 has been filed.

Progress

To date, results have been demonstrated in *Arabidopsis thaliana*, and the trait is stable through generations.

Research to expand proof of concept in other crop species is underway.

We are Seeking

Partners to expand the method in additional oilseeds such as soybean, and advance the technology toward commercial release.

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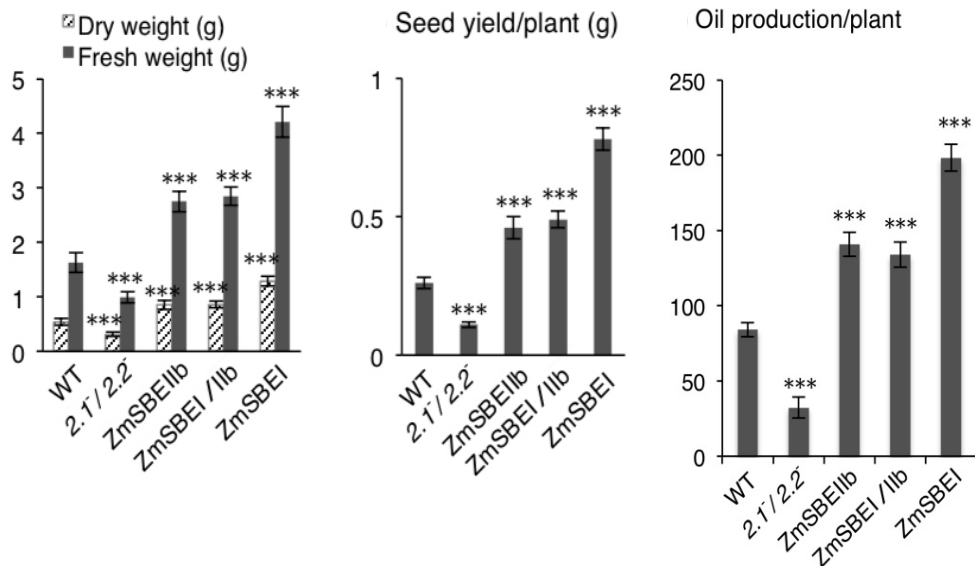
Improved Biomass and Seed Yield in Oilseed Crops

Technology

Large increases in biomass and seed production in oilseed crops can be achieved by replacing endogenous starch branching enzymes with those from cereal crops such as maize.

Methodology

Endogenous starch branching enzymes were substituted with maize starch branching enzymes ZmSBEI or ZmSBEI**lb**. Altered starch metabolism results in increased biomass, 100%+ increase in oilseed production and oil production per plant, with no decrease in oil quality.



Reference: Liu, F. et al (2015), "Modification of starch metabolism in transgenic *Arabidopsis thaliana* increases plant biomass and triples oilseed production", *Plant Biotechnology Journal*, Vol 14(3), pp 976-985, DOI: 10.1111/pbi.12453