

# THE A-MAIZE-ING GRAIN !

Environmental stresses like drought caused by changing climate drastically reduce crop yield.



Vegetative Storage Proteins (a plant's energy bank!) which can increase crop yield in stressful times remain amiss in grasses!



Using biotechnology, scientists tested maize plants for improved drought tolerance by multiplying this protein in its leaf cells by more than five times!



But, in a one-of-a-kind breakthrough, scientists identified and characterized a protein in maize which behaves like a Vegetative Storage Protein!

They conducted this study during the flowering stage of plant growth when drought affects grain yield the most.



But, as external conditions improved, the plants with multiplied proteins relied on this additional energy reserve to regain health faster.



Vegetative storage protein acted as an energy bank and proved especially important for plant health during drought.



With increased tolerance to drought, it might now be possible to increase maize yields!

