



Stomata Signaling Pathways for Increasing Yield Potential in Wheat

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Abstract

Photosynthetic potential in cereals is one of the major limiting factors to increasing grain yield. Stomata are small pores found on the epidermal layer of aerial plant organs. They are key determinants of photosynthetic capacity as they regulate gaseous exchange and play a major role in balancing CO₂ uptake to maintain photosynthesis whilst minimizing water loss to avoid dehydration. This project targets genes involved in pathways that control stomatal development, density and function to determine their impact on grain yield, biomass and water-use efficiency (WUE). Project outcomes will fine-tune our approaches for improved yield potential and stability.