

Current agricultural methods often overuse fertilizer, causing environmental problems by polluting water with phosphates and creating dead zones in oceans downstream. "Larger roots allow plants to more efficiently acquire both nutrients and water. We can optimize inputs while minimizing environmental impacts. This is advantageous for our environment and for all consumers," said Gaxiola. Altering the expression of this gene in rice, corn, barley, wheat, tomato, lettuce, cotton and finger millet caused better growth in roots and shoots, and also improve how the plants absorbed nutrients.