‘Scarecrow’ gene enhances photosynthesis

A recently discovered gene could lead to new varieties of staple crops that have 50 percent higher yields.

By 2050, the world faces the challenge of feeding a projected 9.5 billion people, while using the same amounts of water, fertilizer, and arable land as today.

The new gene, called Scarecrow, is the first discovered to control a special leaf structure called Kranz anatomy, which leads to more efficient photosynthesis. Plants photosynthesize using one of two methods: C3, a less efficient, ancient method found in most plants, including wheat and rice; and C4, a more efficient adaptation employed by grasses, maize, sorghum, and sugarcane that is better suited to drought, intense sunlight, heat, and low nitrogen.

Read the full press release here: Grow better crops with ‘Scarecrow’ gene