'Supercharged' GMO crops could store 20 times more CO2 than average plant

Scientists are experimenting with new genetic modification technology that "supercharges" plants to enhance what they already excel at– sequestering carbon. As the world scrambles to find innovative mitigation solutions, plants have been doing what they quietly perfected over millions and millions of years ago– taking carbon from the atmosphere and converting it into carbohydrates, energy and oxygen.

A recent study shows one research institute's promising progress on the quest to create a patented plant that grows deeper, cork-like roots that store 20 times more carbon than the average plant. The researchers believe these findings can eventually be applied to cash crops at a scale that can truly impact climate change.

The California-based Salk Institute is leading the way in what they call the Harnessing Plants Initiative. Their goal is to create an enhanced plant that not only stores more carbon but also yields an agricultural product that profits farmers and feeds people. Historically, genetic plant modification has been used to target and enhance specific traits within a plant, such as the size or taste of the fruit or its resistance to pests and disease. Now, Salk's plant biologists are targeting specific hormones and genes that indicate and increase root biomass.

Read full, original article: Digging deeper for climate solutions: deep-root GMOs could feed world and store carbon