

Scientists announce development of wheat strain that produces 30% greater yields

May 14 2013, by Bob Yirka



Credit: Wikipedia.

(Phys.org) —Researchers in Britain have announced the development of a new strain of wheat that early reports suggest produce 30 percent greater yields than those currently in use.

Developed by the Cambridge-based National Institute of Agricultural Botany, the new strain came about as researchers mixed "ancient" seeds (from seed banks) with those from the modern era. Importantly, the process did not involve genetic modification as such grains have been banned in many countries. Instead, the researchers cross-bred samples and used embryo transfer techniques to bring about a wholly new strain of wheat. Its developers say that thus far, they've seen yield increase of up to 30 percent. They add that the new strain is hardier as well—able to



stand up to pests and drought better than conventional wheat varieties.

The news comes as welcome relief to people in Britain as <u>bad weather</u> has led to less <u>wheat production</u> than normal, giving way to its importation for the first time in over a decade. More importantly, an increased wheat yield has become crucial as the <u>world population</u> continues to grow. Recent estimates suggest that as many as a fifth of all calories consumed by people worldwide, come from wheat. In contrast, scientists have noted that the last 15 years have seen little increase in wheat yields. Some scientists have suggested that wheat yields will have to double over the next half-century to keep ahead of population growth. Put another way, the researchers claim that the world will have to produce more wheat over the next 50 years than has been produced over the past 10,000 years in order to keep ahead of demand.

Wheat evolved from goat grasses co-incidentally or not, around the same time as people were beginning to learn to grow their own food, the research team notes, most likely in the Middle East. Since that time, humans have reduced the varieties of wheat that are grown, resulting in an erosion of the plant's <u>natural diversity</u>. Cross breeding modern strains with much older samples that have been preserved in seed banks will bring back some of that diversity, and in this case, hopefully lead to increased yields.

Unfortunately because of governmental regulations, the new wheat strain can't be grown commercially in Britain for five years. That time interval will give scientists and others time to more thoroughly investigate the new strain to ascertain if the initial findings hold.

More information: via **BBC**

© 2013 Phys.org



Citation: Scientists announce development of wheat strain that produces 30% greater yields (2013, May 14) retrieved 8 May 2024 from https://phys.org/news/2013-05-scientists-wheat-strain-greater-yields.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.