

Scientists want 'rewilded' crops to boost agriculture

ROME: Scientists should "re-wild" food crops by inserting lost genetic properties of ancient, edible plants in order to boost agricultural output for a growing population, a new study said.

Important properties of wild plants, including varieties of wheat and rice, have been unintentionally lost during thousands of years of breeding.

When humans first domesticated wheat around 7500 BC, farmers chose to use seeds based on a few selected traits, particularly their yields.

But such decisions, made by generations of farmers, could have weakened the resilience of crops in the face new challenges such as global warming, according to the study published on Tuesday in the journal *Trends in Plant Science*.

"We estimate that all crops would benefit from re-wilding," Michael Broberg Palmgren, a scientist at the University of Copenhagen and one of the study's authors, wrote in an email.

Re-wilded crops could become more drought tolerant, more resistant to cold, dis-



eases and pests and more efficient in accessing soil nutrients, Palmgren wrote.

The scientists suggest using biotechnology to re-insert desired genes from wild varieties of popular crops into widely consumed strains in order to improve food security.

The plan is less controversial than other Genetically Modified Organisms (GMOs) as it does not involve the trans-

fer of genes between unrelated organisms, Palmgren said.

Scientists are unsure how much more food could be produced if farmers follow their advice. But they say that current problems such as climate change, population growth and soil degradation add to the urgency of harnessing the potential of ancient genetic material.

Reuters