Collapsing colonies - Are GM crops killing bees?

A mysterious decimation of bee populations has German and US beekeepers worried. The consequences for agriculture and the global food economy could be enormous. The question is now being asked - could this collapse of bee populations have a linkage to the growing of GM crops? Another theory has mobile phones as the responsible agent.

Walter Haefeker is a man who is used to painting grim scenarios. He sits on the board of directors of the German Beekeepers Association (DBIB) and is vice president of the European Professional Beekeepers'Association. And because griping is part of a lobbyist's trade, it is practically his professional duty to warn that "the very existence of beekeeping is at stake."

The problem, says Haefeker, has a number of causes, one being the *Varroa* mite, introduced from Asia. Another is the widespread practice in agriculture of spraying with herbicides and practicing monoculture. Another possible cause, according to Haefeker, is the controversial and increasing use of genetic engineering in agriculture.

As far back as 2005, Haefeker ended an article he contributed to the journal Der Kritischer Agrarbericht (Critical Agricultural Report) with an Albert Einstein quote: "If the bee disappeared off the surface of the globe then man would only have four years of life left. No more bees, no more pollination, no more plants, no more animals, no more man."

Mysterious events in recent months have suddenly made Einstein's apocalyptic vision seem all the more topical. For unknown reasons, bee populations throughout Germany are disappearing - something that is so far only harming beekeepers.

But the situation is different in the United States, where bees are dying in such dramatic numbers that the economic consequences could soon be dire. No one knows what is causing the bees to perish, but some experts believe that the large-scale use of genetically modified crops in the US could be a factor.

The scientists are also surprised that bees and other insects usually leave the abandoned hives untouched. Nearby bee populations or parasites would normally raid the honey and pollen stores of colonies that have died out.This could suggest that thereis something toxic in the colony itself which is repelling them.

According to Hans-Hinrich Kaatz, a professor at the University of Halle in eastern Germany,a bacterial toxin in genetically modified maize may have "altered the surface of the bee's intestines, sufficiently weakening the bees to allow parasites to gain entry - or perhaps has affected them by some mechanism we have yet to understand.