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Comment from Kenneth R. Foster Professor of Bioengineering University of Pennsylvania about worldwide media reports on an Indian study reporting that electromagnetic radiation from the mobile towers and cell phones is threatening bee populations.

"Mobile towers are posing a threat to honey bees in Kerala with electromagnetic radiation from mobile towers and cell phones having the potential to kill worker bees that go out to collect nectar from flowers...if measures are not taken to check mushrooming of mobile powers, bees could be wiped out from Kerala [India] within a decade, environmentalist and Reader in Zoology, Dr Sainudeen Pattazhy says in his study."

These alarming words, in a story released on 31 August by the Press Trust of India, have been repeated in countless web sites around the world.

After some effort I tracked down the author of this study, a lecturer at an obscure college in India, and asked him to provide me with information about his study. I received, in the course of several rounds of email, a two page document that consisted almost entirely of editorializing with his views about hazards of radiofrequency energy.

Here is the only part of the paper that describes his study on honeybees (all verbatim quotes from his paper):

"In one experiment I have placed mobile device near to the hives for 10 mts. [10 meters from?] for only 5 to 10 days . After few days the worker bees never returns home. The massive amount of radiation produced by towers and mobile phones is actually frying the navigational skills of the honey bees and preventing them from returning back to their hives. The thriving hives suddenly left with only queens, eggs and hive bound immature worker bees." "If towers and mobile phones increases the honeybees might be wiped out in 10 years," Pattazhy concluded.

I sent Pattazhy one final email, asking for a description of the study design, methods of exposure assessment, what controls he used in the study, hypotheses tested, statistical analysis of data, or other aspect of a valid study. So far he has not replied.

I conclude: there was NO STUDY. Dr. Pattazhy may have strong opinions about the hazards of mobile phone radiation, but he has produced no new evidence to support his beliefs.

Other investigators have studied the effects of radiofrequency energy on honeybees, as part of environmental assessments for a proposed solar power satellite system that would beam high intensity microwaves back to earth. In 1981 Gary and Westerdahl reported a study on possible effects of microwave energy on foraging of honeybees (Bioelectromagnetics 2(1):71-5, 1981). They measured flight, orientation, and memory functions in honeybees after 30 minutes' exposure to 2.45-GHz continuous-wave microwaves at power densities from 3 to 50 mW/cm² - similar in frequency to that used by mobile phone networks but at a power density that far exceeded exposure levels at nearly all locations from base station antennas. The investigators found "no evidence that airborne invertebrates would be significantly affected during transient passage through microwaves associated with [solar power satellite] ground-based microwave receiving stations."

"The mobile phone industry is putting quite a bit of money in to the pocket of these scientists by supporting their work regarding viruses and alternative explanations [for the decline in honeybee populations around the world]." Pattazhy alleges. Could that be the reason for the sharp decline in research money from industry on possible health effects of mobile phone radiation?