

Researchers hope to use bugged bugs for search and rescue

December 29 2011, by Deborah Braconnier

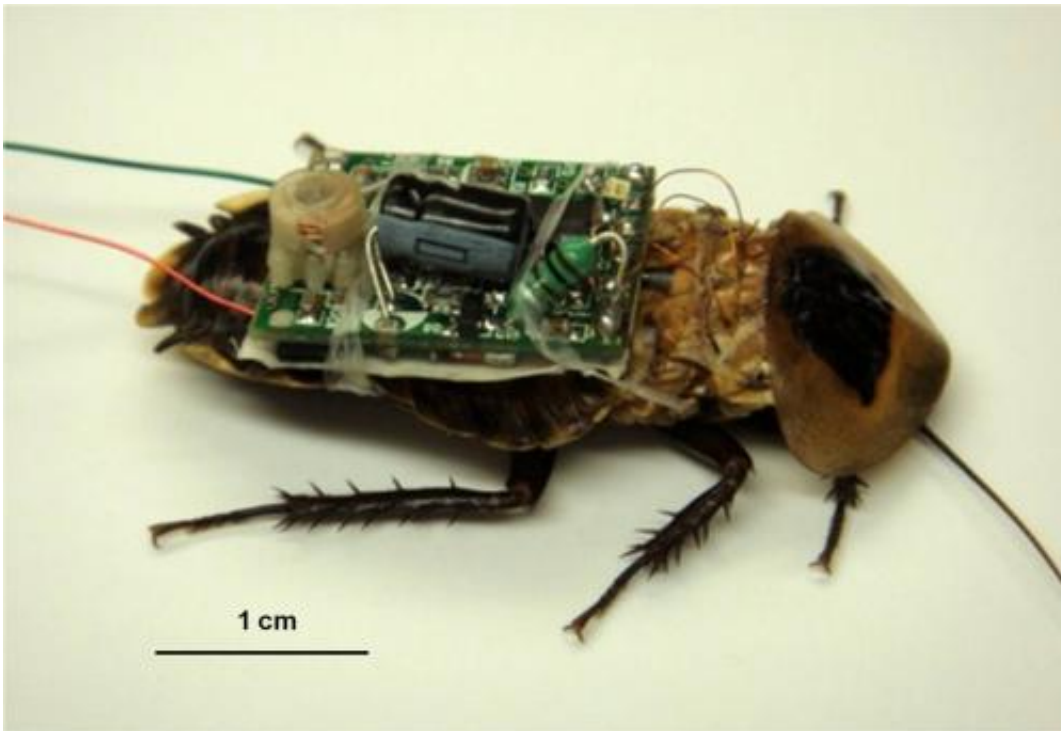


Image: DARPA

(PhysOrg.com) -- While search and rescue dogs are currently used to help locate survivors of earthquakes or other disasters, new research hopes to make this job easier by turning to bugs. Insects have the ability to get into the smallest of places and could make locating people that much easier.

The research project, titled the [Hybrid Insect Micro-Electromechanical Systems program](#), is funded by the U.S. [Defense Advanced Research Projects Agency](#), or [DARPA](#) and the technology is being designed by a team of computer and [electrical engineers](#) from the University of Michigan.

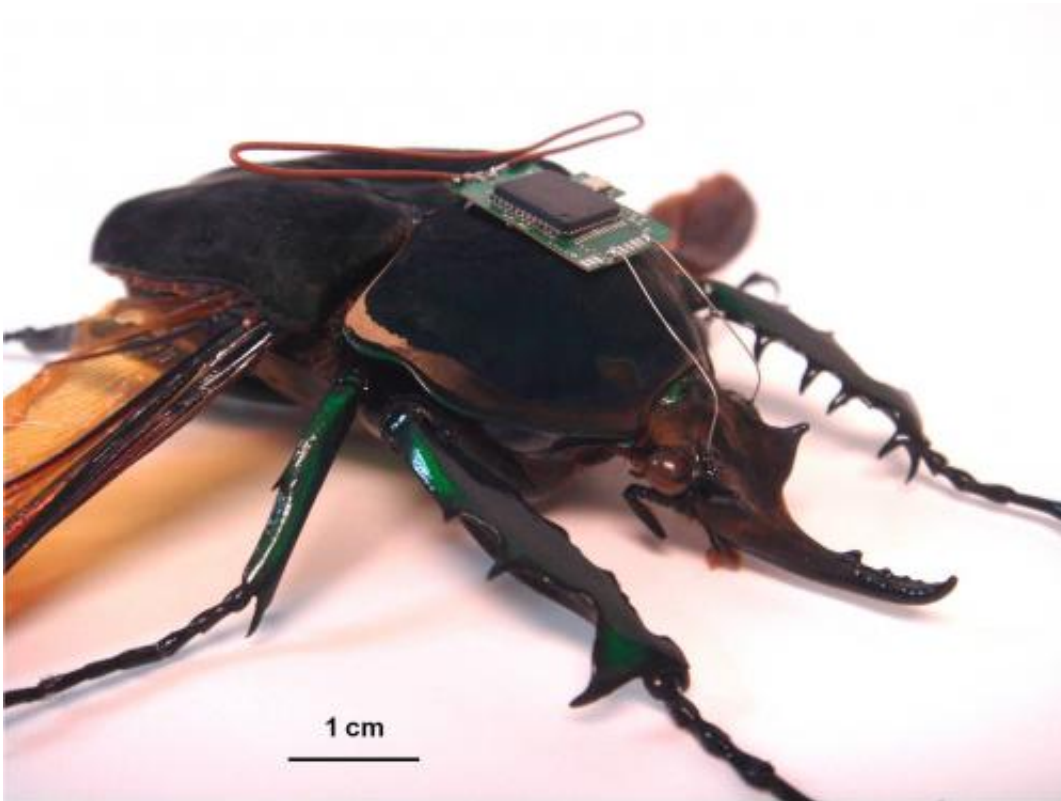


Image: DARPA

Led by Professor Khalil Najafi, the new technology is designed to use the insect's kinetic energy to power things such as miniature cameras and microphones that can be mounted on their backs. These insects can then be released into building or rubble that is deemed to be too dangerous for humans and help locate possible survivors.

The research team has already created a device that is able to harness the energy created by the wing movement of the Green June beetle. The idea now is to place a miniature generator on each of the beetle's wings to create enough power to run miniature location devices such as camera and microphones.

These tiny insects could also be used by the military as well as by facilities such as the Fukushima nuclear power plant. They would be able to go into virtually any place where it is too dangerous for humans.

The research team is hoping to be able to conduct the first insect test flights at some point next year. They are pursuing patents for their technology and hoping to secure additional investors to aid in the pursuit of this project.

If successful, these bugged bugs could make a big difference in locating survivors of many natural disasters worldwide.

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