

HANDHELD DEVICE USES WASPS AS SCENT HOUNDS

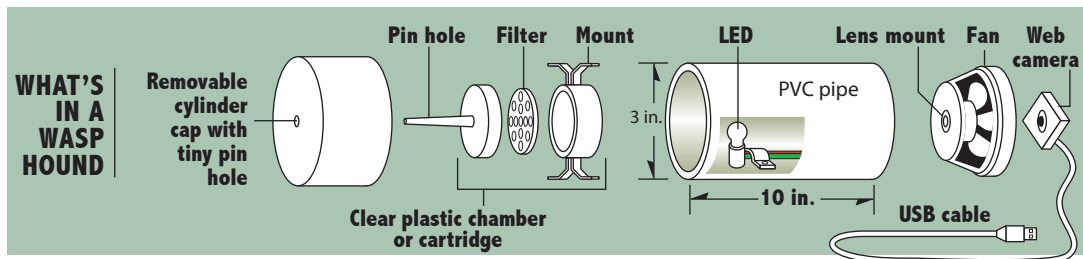
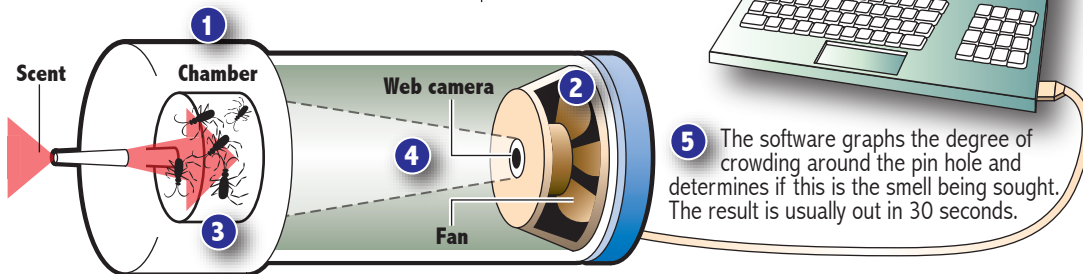
A device called a Wasp Hound uses specially trained parasitic wasps for the purpose of detecting selected chemical compounds. Invented by Glen Rains, a biological engineer at the University of Georgia, W. Joe Lewis, an expert on wasps, and Samuel Utley, the device gives researchers hope that wasps and other insects with a predilection for sniffing anything, from illegal drugs to explosives, will be in widespread use in the next 10 years.

HOW THE DEVICE IDENTIFIES CERTAIN SCENTS WITH THE HELP OF WASPS

- 1** Five wasps that have been trained to detect a certain scent are placed inside the chamber.
- 2** The fan inside the tube draws air into the chamber through the pin hole in the cap.
- 3** If the smell they are trained to identify whiffs through, these wasps will crowd around the pin hole.
- 4** The web camera snaps a picture of the wasp's reaction to the scent and displays the image on a computer monitor.

The software measures the dark spots around the pin hole against the white back-ground of the cylinder cap.

- 5** The software graphs the degree of crowding around the pin hole and determines if this is the smell being sought. The result is usually out in 30 seconds.



Sources: University of Georgia College of Agricultural and Environmental Studies; www.news.nationalgeographic.com; www.sciencemuseum.org.uk

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