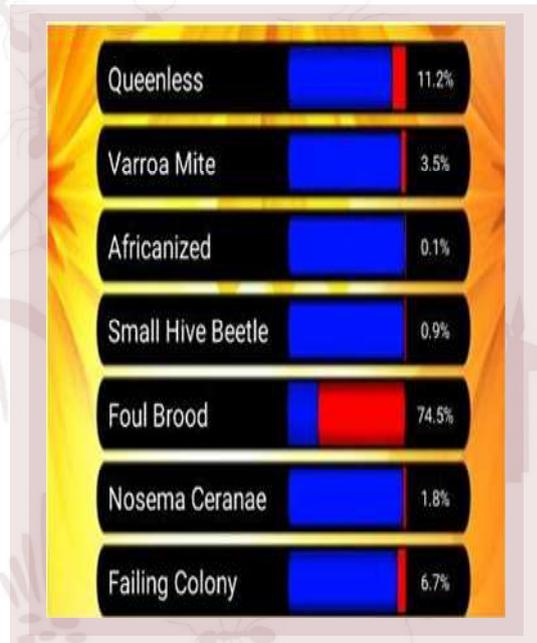


An app of their own

Honeybees offer us sweet memories of blooming landscape dotted with flowers under a sunny sky, the humming in a desolate afternoon, the aggressive defense against unprepared onlookers, and undoubtedly the sweet sweet honey, a global product of USD 7.84 billion annual turnovers in 2020. Bees are valuable in every sense so their colonies. They give us honey as well as headache simultaneously when there are serious issues in maintenance of the bee populations. There could be parasite attack, chemical effect, environmental change, management stress, or colony collapse disorder (CCD). However, detecting and understanding the problem is the crucial factor for the successful management of the bee populations. Here comes the “App” for them.



“Bee Health Guru” is an application software (aka. app) developed by University of Montana researchers to track abnormal or not normal conditions among the bees based on the noise they generate. The core concept is bees make



different noises depending on conditions; therefore, a “not normal” situation may create an utterly different soundtrack in comparison to normal condition. The app is built on artificial intelligence programming coupled with a reference database of bee sounds. Once the sound of a bee colony has been recorded with the smartphone, the audio will be analyzed through this app to detect any abnormality in the population. Currently, the app can tell us about intruders like Africanized bees, beetles, Varroa mite, and diseases like Foul Brood, Nosema Ceranae. Or it can also state the hive conditions like queenless state or failing colony, etc. What you have to do is a series of simple tasks like download the app, switch on the audio recording, and keep your mobile very near to the bee

population for minimum of 30 seconds. Once the recording is done the app will do the rest of the job, i.e., the analysis of the soundtrack and the result.

Like any other app in our daily life, the app is improving continuously through acquiring audio data from multiple sources to upgrade the database as well as improving the in-built AI. Indeed, it is a great help for the beekeepers around the world to get the preliminary signals about the brewing problem in their pet colony sans time and expertise. And be armed and alert!

Source and Image : <https://www.kickstarter.com/projects/beehealthguru/bee-health-guru-a-smartphone-app-for-beekeepers/description>

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