Commentary on "Codifying the universal language of honey bees"

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Honeybees play a critical role in modern agriculture, however recently they are facing many problems. As mentioned in the article "Honey Bee Research in the US: Current State and Solutions to Beekeeping Problems", there are a variety of challenges that honey bees face, such as pesticides. The honey bee population is now seeing a staggering loss in North America and Europe, with as much as 40% of hives being lost over the winter (López-Uribe et al. 2019). And there are many factors that are contributing to the decline besides pesticides. Research has suggested that diseases and poor nutrition are among the largest contributors to the loss of honey bees.

In response to the many problems plaguing the honey bees, there has been a lot of research conducted on the honey bee, which represents a huge economic value to agriculture. One article that was recently featured in the Science Daily article announced that researchers at Virginia Tech have made a revolutionary contribution to honey bee research, by identifying how honey bees communicate. Honey bees that forage for food will often do what is called a "waggle dance" to show other bees where they have found food, for example, bees that are able to find clover species and alfalfa do more than three times as well than if they are put next to crop fields of sunflowers or canola (USDA 2019).

This new research is a leap forward to helping honey bees, which are currently under a lot of pressure. The research that is being done on honey bees will help us better understand what problems the bees are facing. For example, a healthy hive can easily defend itself from attacking yellow jackets, however, if a hive is weakened by diseases or parasites such as the Varroa mite, for example, the yellow jackets have an opportunity to do much more damage to a hive that cannot defend itself (Ricciuti 2019).

As a beekeeper myself, I think that continuing to research and invest in honey bees is one of the most important things that is taking place in agriculture. Even with all of the modern advancements in agriculture, there is no suitable replacement for the honey bee. Without honeybees, the crops will not be pollinated, and our food systems will fail.

Bibliography

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