## Bye, buzzing bees

**Business** 



As a child, I used to visit my family's bee farm.

There was no greater joy than tasting the fresh, sweet honey dripping from an apiary. Many pleasant memories were made on that farm as I watched the hardworking bees pollinate the wildflowers of the area. It was inspiring to see such small creatures work so hard to pollinate all kinds of flowers, fruits, and vegetables. However, could you imagine a world without bees? A world without honey, almonds, pears, avocados, grapes, or wine? Thanks to bees constant pollination, 84 percent of the 264 crop species and 4, 000 vegetable varieties exist (Khouri). The reality is that over the last decade there has been a massive decline in the bee population. In 2006, beekeepers began reporting high number losses to colonies where adult bees simultaneously disappeared and never returned back to their hives.

Only the queen bee, immature bees, and plentiful food remained (" Bee Colony Collapse Disorder"). There was no evidence of diseases, dead bees, or any of the usual predators around: " The bees were just gone, out of thin air" (Gianni). This phenomenon is known as Colony Collapse Disorder (CCD), and what causes it continues to baffle scientists; however, many theories have arisen that may explain the bees' disappearance. One theory suggests that the increased amount of pesticides used in crops today harm the bees, which is why bees are disappearing out of the blue. Naturally, a solution must be thought of in order to keep the balance of nature, and in my opinion, the most beneficial solution to CCD is ecological farming because it favors both bees and the environment. Ecological farming means farming without pesticides, hormones, or any sort of genetic engineering.

In 1990, a primary pesticide called neonicotinoid was believed to directly impair bees, both physically and cognitively. In some countries in Europe, such as France, this pesticide has been banned and become illegal just because it has been suspected of harming bees ("Bee Colony Collapse Disorder"). The researchers demonstrated that high doses of neonicotinoid can kill bees, while low doses could cause neurological changes. The primary neurological impairment was the loss of sense of direction, causing them forget the way back to their hive. If ecological farming were to be practiced more it would take the neonicotinoids out of the ecosystem and would benefit the health of bees. Ecological farming would also be beneficial for the environment because it promotes more biodiversity.

The more an environment is stable and sustainable the more bees will be attracted to the area. Many plants have not been able to adapt or survive the large flux of pesticides and due to large doses of pesticides, the anatomy of some plants has completely changed. As Axel Decourtye, an ecotoxicologist and director of France's Apiculture Institute, explains," Unlike previous generations of pesticides, neonicotinoids are spread not only on the actual plants but may directly be coated on seeds. They are systemic insecticides that find their way into every plant tissue, including the pollen and nectar of flowers" (Cailloce). Consequently, neonicotinoids spread everywhere in the plant, harming both the plant and the pollinator. If ecological farming were to be practiced it may create an environment suitable for both plants and the bees.

Some people do not share the same view on ecological farming. The human population is continuously rising; in fact, by the year 2050, the human https://assignbuster.com/bye-buzzing-bees/

population will rise to 9. 7 billion people ("World Population Projected").

Many are concerned that ecological farming will not produce enough food for future generations and that researchers should focus on feeding mass populations. To an extent, I concede to this claim because would be very difficult for mass food production through ecological farming.

This type of horticulture requires a lot of maintenance, care, and attention. It may be challenging to get the best technology and a sufficient amount of staff members to carry out this type of farming. However, there is a necessity for ecological farming. Despite the financial and maintenance difficulties, ecological farming could be favorable to humans as well. With ecological farming, food with hormones and pesticides wouldn't be a problem.

High levels of pesticides in food are hazardous to human health and cause many different issues: reproductive and developmental issues, cancer, kidney and liver damage, and endocrine disruption ("Pesticides").

Organically grown food that comes from ecological farming is key to the health of humans the environment. Albert Einstein once claimed, "If the bee disappeared off the face of the Earth, man would only have four years left to live" (Rodgers). This quote is attributed to Colony Collapse Disorder, the mysterious phenomenon that has wiped the bee population all around the world. The human race and all of nature are in danger and a solution must be figured out in order to not enter a crisis. Nevertheless, I believe that ecological farming is the most beneficial solution to this problem and with dedication, it could become feasible.

If accomplished it could bring more benefits to the bee species and nature and it can be a permanent solution to CCD. In the end, I think of a little girl standing in an empty bee farm and what she would have to say.