

Pollen-sized Pills Could Help Protect Bees from Pesticides

Huong Nguyen

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The article is an informational piece regarding the scientific research of a pill that aims to protect bees from organophosphate and raise concerns about Colony Collapse Order on *ABC News* (2), considered to have a neutral bias. The author, Karen Kwon, is an environmentalist with a special interest in “intersecting science and society” and wrote several articles with positive connotations concerning the health of bee colonies and biodiversity. Because she has over eight years of background in chemistry and working as a science journalist, her reporting includes several pieces of evidence and data to support her analysis. The source data is provided by *Nature Food* (1), documenting the relationships between pore size distribution, enzyme activity, and survival data in supporting this low-cost detoxification model using microparticles for organophosphate insecticides.

The article further mentions clear-cut, concise analysis based on the experiment provided with the data. When bumblebees were given a high dose of a form of organophosphate, the researchers found that 70 percent of those with the OPT pills survived after 12 hours, contrasting to the 37.5 percent of those given OPT alone and 27.5 percent of those with nothing.

The company, Beemunity, has also been featured on *Cornell Chronicles*, *CTV News*, and *Fast Company*.

The article contains several undated graphics, with pictures of bumblebees to illustrate the importance of the creature in the role of supporting agriculture. The call-to-action hero landing video page contains several facts that can be found on the company's website, such as how 25% bumblebees are facing extinction. Instead of focusing on promoting the vaccine-like microparticle that can detoxify chemicals in pesticides like the article, the video reminds readers to take grassroots actions, such as planting more native plants. The video featured on *ABC News* is a repost from The Xerces Society for Invertebrate Conservation (3), a nonprofit that has a reputation for being a left-winged source, with blogs and social media posts featuring conservative ideology on economic issues that could potentially harm the environment. Besides the video, the article also features opinions from the company's founder, Webb, and a technology enthusiast named Johnson. The technology enthusiast, Johnson, demonstrates enthusiasm about the potential of the technology, citing that it is "really innovative." Overall, he seems to have a positively biased viewpoint, with the only concern being the effect of organophosphates on human health. Both Webb and Johnson focus heavily on the company's expansion, with plans to commercialize the idea and test it on different types of bees. While there is unclear evidence on whether the product is tested to work on all types of pesticides, the article exudes a lot of enthusiasm and assertiveness on the product's effectiveness in experimenting with different types of bees, as well as the potential growth of the company.

References and Notes

1. Chen, J., Webb, J., Shariati, K. *et al* Pollen-inspired enzymatic microparticles to reduce organophosphate toxicity in managed pollinators. *Nat Food* 2, 339–347 (2021).
2. Kwon, Karen. "Pollen-sized pills could help protect bees from pesticides". *ABC News*, June 2021. Web. June 21, 2021
<https://abcnews.go.com/Technology/pollen-sized-pills-protect-bees-pesticides/story?id=78375629/>
3. "The Xerces Blog." *Xerces Society*, 2006-2021. Web. June 20, 2021
<https://www.xerces.org/blog>