



Testimony in Support of HB 319 Pesticide Regulation – PFAS Testing – Requirements

February 21, 2023

Committee: Health & Government Affairs

Submitted by: Central Maryland Beekeepers Association

Position: Favorable

If the bees and other pollinators were not already besieged from all sides by pesticides and a host of other problems, there is another one that is not even directed at them that we are just now learning about.

A class of compounds called “forever chemicals” because not even bacteria can eat them or degrade them, **PFAS have recently been shown to be as toxic to bees as chemicals designed to kill insects!** They are found in many places, but particularly worrisome is their presence in pesticide formulations such as mosquito spray, which are purposely broadcast into our environment on a massive scale. Even if the PFAS are not intentionally added to the pesticides but are present as accidental contaminants, they are there in many cases.

As these sprays are used according to label directions, the PFAS are spread with them. Eventually, the pesticides degrade and have to be reapplied, but the PFAS from the first application remain. **Every application adds to what is already there, contaminating the soil and water more and more. Plants naturally absorb the water through their roots, and the PFAS end up in the nectar of the flowers, which is what the bees eat.** Bees also collect water from puddles, ponds, and streams, which may also become contaminated.

[A study on the effects of PFAS on bees published April 2021](#), found at a microscopically low concentration, **20 parts per billion, PFAS halts all brood-rearing in the colony. Killing the babies kills the colony, because honey bees only live about six weeks**, and workers who die off must be constantly replaced. A typical colony of about 50,000 bees loses over 1000 workers a day to old age. Without new workers coming along, the colony is doomed. **The population declines rapidly, and in a few weeks, the colony dies. At slightly higher concentrations, the bees die quickly**, and a colony may not last a day. As these toxins do not degrade in the environment, they continue to do damage forever.

It is vital that the widespread use of PFAS in pesticides be reduced or eliminated, and that is only possible if we know how much is present in the pesticides.

Please pass bill HB 319 to ensure that these contaminants are not spread across our state.