



INTEGRATED PEST MANAGEMENT ON CANNABIS, HEMP AND ORGANIC FARMS

ISSUE: Integrated Pest Management (IPM) on or near cannabis, hemp and organic farms is lacking and requires new pesticide tolerances and approval of products for use in these growing industries

Background: The growth of organic farming over the years, along with the recent expansion of both cannabis and hemp production across the United States, has presented a new challenge to Vector Control Districts. With very few products labeled for mosquito control use in these farming practices, there is a greater concern with increasing pesticide resistance in mosquito populations. Furthermore, the lack of pesticides that are registered to control mosquitoes on cannabis, hemp and organic farms creates a gap in the public health infrastructure to manage future vector-borne public health outbreaks.

Discussion: A key tenant for every IPM program is rotating pesticides to limit the development of pesticide resistance and better **manage** the target pest population. However, there is currently only one product that is OMRI certified for adult mosquito control applications on organic farms. With the rapid expansion of cannabis and hemp farming, there are no products labeled for mosquito control use on these farms. In contrast, there are 58 pesticides registered for use on cannabis and hemp targeting other pests.

In part, the lack of products labeled for mosquito control use in these industries is due to a lack of defined crop tolerances for products used in mosquito control applications on cannabis or hemp. It is the EPA's responsibility to regulate pesticides that are used by growers and to set limits on the amount of pesticide that may remain in or on crops grown for human consumption and animal feed throughout the USA. Because many of these new cannabis, hemp and organic farms are smaller and being established in close proximity to residential areas, the EPA needs to act swiftly in order to reduce the disease risk caused by mosquitoes that lay eggs in or seek harborage in these areas. Residents that live near these crops are at risk, due to the average flight range of many mosquito species.

Improved pesticide drift models would provide a valuable solution to assist the EPA in establishing proper crop tolerances, which would pave the way for new products being labeled for use on these crops for mosquito control. Currently, the drift models used to assess deposition and set tolerances have been developed for agricultural applications. These models are based on agricultural drift and deposition, and thus are not suited for the conditions that impact ULV applications in mosquito control. Consequently, they often misrepresent the impact of public health applications on the environment and the crops they are applied near.

NEEDED ACTION:

The EPA should be urged to recognize that Integrated Pest Management needs to occur in and around cannabis, hemp and organic farms. To facilitate this urgent need, we must fund the development of more organic products that are labeled for mosquito control. Simultaneously, research needs to be conducted to develop scientific-based tolerances for cannabis and hemp crops.
