

November 3, 2021

Pesticide Re-Evaluation Division  
Office of Pesticide Programs  
Environmental Protection Agency  
1200 Pennsylvania Ave. NW,  
Washington, DC 20460

Submitted via the *Federal eRulemaking Portal* at <http://www.regulations.gov>

**RE: Comments on the Proposed Interim Decision Involving Pyrethrins (Case Number 2580 -- EPA-HQ-OPP-2011-0885), Piperonyl butoxide (Case Number 2525--EPA-HQ-OPP-2010-0498) and MGK-264 (N-octyl bicycloheptene dicarboximide) (Case Number 2430--EPA-HQ-OPP-2012-0415)**

The undersigned national and state agricultural organizations appreciate the opportunity to offer written comments on the Environmental Protection Agency's (Agency) above referenced Proposed Interim Decision (PID) involving application methods for the insecticide pyrethrin and two synergists, MGK-64 (MGK) and Piperonyl butoxide (PBO). Comments were initially due on October 4, 2021 but that period was extended to November 3, 2021. These products are safe, effective and absolutely essential to the management of key insect pests in animal houses, worker exposure is minimized through the use of sound integrated pest management principles and other measures, and non-worker exposures are almost entirely eliminated due the biosecurity practices in use at these facilities. We urge you to reconsider the analysis that resulted in this PID in light of the information below as well as the comments submitted by several other entities as to the safe and wise use of these products. We are ready supply you with more information and details if that would be of assistance to you.

**General Observations**

Fly control in animal agriculture facilities is fundamentally important to prevent the spread of animal diseases, to reduce vector transmission of foodborne illness causing organisms like salmonella, the comfort and welfare of the animals, and the benefits to those working in or around the facilities. Pyrethrins used with the synergists , PBO or MGK-264, ( pyrethrin +) is the core foundation of many of the fly control programs in use today at animal agriculture facilities. This is because pyrethrin + is the most effective option available, and in the case of some species of commercial animals the only widely effective and suitable option that can be used in the houses when animals are present.

These are the most effective and safe products for controlling the adult fly populations without the potential for development of resistance. Other products or integrated pest management (IPM) tools are used in conjunction with pyrethrin + to control of the developing immature forms of the insects.

One of the most common modes of application are through backpack sprayers, foggers and misting systems. Misting, spraying and fogging methods of application are essential in these programs using pyrethrin + because they maximize the odds that the airborne adult flies inside animal houses will come into contact with the product which also remains airborne due to small particle size.

Pyrethrin + works quickly and has been used for decades without indications of resistance development, and it degrades rapidly without leaving any problematic residue to further increase the risks of resistance developing. The alternative products available and labelled for these uses are either far less effective, require several more applications, or would inevitably drive resistance among the adult fly breeding population. The common IPM methods in use today often involve the use or encouragement of beneficial parasitic wasps at facilities; pyrethrin + is used because it provides adult fly control where the product quickly degrades with no surface residue reducing or eliminating risks to the wasp population.

### **Worker Exposures to Pyrethrin +**

It is our understanding that fly control experts will be supplying the Agency with specific information about the length of time that workers apply pyrethrin +, about the size of the areas being treated, the amount of time that the workers normally spend in a day applying the products, and how frequently. It is our understanding from these professionals that in the case of egg laying hen houses, the treatment using backpack foggers commonly takes 10 minutes, during which and after no other people are allowed in the house. The applicators, using proper PPE, walk backwards through the facility while fogging, thereby not walking directly through the fogged product. It is our understanding that similar best practices are used in the other sectors to protect the workers, It is also our understanding that the use of these products generally follows sound IPM principles, where their timing and frequency of usage is driven by the fly populations themselves. In practice, this means the products are used judiciously and as infrequently as possible to achieve control.

Misting systems are growing in use in animal agriculture due to their lower application costs, reduced labor requirements, and the flexibility and precision they allow in application times, locations and amounts. These systems effectively limit human exposure to the pyrethrin + by eliminating the need for hand application. A large proportion of western dairy operations, for example, are known to use misting systems to treat the cows when they enter or leave the milking parlor, effectively ending area-wide or manual applications.

We have been unable in the time available to us to collect more specific hard data on these matters for inclusion in these comments. But should this information not be submitted by others to the Agency during this comment period, we would welcome the opportunity to work with our animal agriculture producer members to provide that to you in a timely manner.

### **Public Exposure to Pyrethrin + That is Used in Animal Houses**

Most modern commercial animal facilities risk catastrophic losses of their animals through disease and death caused by animal infecting agents that are easily introduced by people into facilities and then move rapidly through the animal population. This is of the utmost seriousness. As a result, it is widespread practice in modern US agricultural operations to practice strict biocontrol and biosafety practices. It is extremely rare for any person not working at a facility to be allowed entry into a building, and if it happens it is only under controlled circumstances that often involve cleaning and disinfection practices. Contractors that may provide services at more than one facility must observe restricted periods of time after being in one facility before entering another operation's facilities. People don't just walk in off the street. Period. Neighbors do not enter the buildings. Most family members, if any live at the site, don't enter the buildings if they are not working there. The catastrophic risks to the animals from infectious disease have led to the adoption of these practices. Any estimates of non-worker exposure to the pyrethrin + products used in the animal houses should take this into account.

## **Pyrethrin +'s Role in Food Safety Compliance**

US egg farmers are managing approximately 320 million laying hens on approximately 2000 egg farms across the US. The hens are housed in single facilities for up to 2 years to provide climate control, to aid in the hens feeding and care as well as the egg collection process, and to facilitate sound manure management to protect water and air quality. Essentially every one of these commercial egg farms has more than the 3000 hens that is the threshold for being subject to the mandatory food safety controls and requirements under the Food and Drug Administration's egg safety rule (21 CFR Parts 16 and 118). These egg producers are required by these rules to control flies to reduce the food safety risk of salmonella spread in the houses and to eggs. Egg producers must measure house fly populations weekly, keep records of their measurements, and if certain population thresholds are reached the must take fly control measure. The most commonly used insecticide for this purpose is pyrethrin +, and experienced layer sector observers tell us that nearly every chicken farm in the U.S. uses backpack foggers with pyrethrin +. They add that in the case of layer operations, these producers would not be able to comply with the FDA requirements if these or comparable pyrethrin + application methods are eliminated.

As noted above, it is common for layer manure to become colonized with populations of parasitic wasps that predate on immature forms of the fly. Once pyrethrin + is used in those instances where adult fly control crosses the FDA threshold, it achieves that control without or with minimal harm to the developing or prevalent population of wasps. An established and self-sustaining wasp population can then provide effective control of the fly population keeping it below the threshold levels. If no longer able to use pyrethrin + applied via aerosol measures, these biocontrol systems would not be viable as the alternative adult fly control products would also kill a large proportion of the beneficial parasitic wasps.

## **Summary**

The pyrethrin + products are fundamentally important to the US livestock and poultry sectors for the control of many airborne and other animal house insect pests, especially house and stable flies. These insects are highly detrimental to the health and welfare of the animals, the persons working in the houses, and lead to risks of spread of food safety pathogens. In the case of egg farms, FDA food safety regulations mandate adult fly control to reduce the spread of salmonella pathogens. The pyrethrin + products are the most effective system for adult fly control, and need to be applied as small droplets can be suspended in the air, making the spraying, fogging and misting modes of application essential. The pyrethrin + products permit the control of adult flying insects in particular without disrupting the use of beneficial biological controls, or to manage the resistance that would be generated by the widespread use of the other less effective products. Pyrethrin + is used judiciously by trained workers using methods and protocols that reduce worker exposures. Non-worker exposure to the use of pyrethrin + is functionally eliminated due to the biosecurity and controls in use at the facilities.

We understand that several other authoritative commenters are providing you with further factual details and expert opinions that confirm our comments. But should you require more information or data, our organizations are prepared to work with the Agency in a timely manner to supply you with what is needed to conduct well informed analysis in support of a sound decision about our producer members use of pyrethrin +.

Thank you once again for the opportunity to provide you with these comments.

Sincerely,

American Dairy Association  
American Farm Bureau Federation  
California Egg Farmers  
Illinois Pork Producers Association  
Indiana Pork Producers Association  
Iowa Pork Producers Association  
Kansas Pork Association  
Michigan Allied Poultry Industries  
Michigan Pork Producers Association  
Mississippi Poultry Association  
Midwest Poultry Federation  
Mississippi Pork Producers Association  
Missouri Pork Association  
Montana Pork Producers Council  
National Council of Farmer Cooperatives  
North Carolina Pork Council  
National Milk Producers Federation  
National Pork Producers Council  
National Turkey Federation  
New York Pork Producers Co-op  
North Carolina Egg Association  
Ohio Poultry Association  
Oklahoma Pork Council  
Pacific Egg & Poultry Association  
Pennsylvania Pork Producers Council  
PennAg Industries Association  
South Dakota Pork Producers Council  
SC Poultry Federation  
The Poultry Federation  
Tennessee Pork Producers Association  
Texas Poultry Federation  
Texas Pork Producers Association  
U.S. Cattlemen's Association  
United Egg Producers  
US Poultry & Egg Association  
Utah Pork Producers