

Development of a Mosquito Control Pest Management Strategic Plan




Larvicide application in Hudson
County, New Jersey

When the Food Quality Protection Act (FQPA), with its extensive new data requirements for pesticides, was passed in 1996, there was concern in many pesticide user communities that important pest control tools could lose their registration if the data costs were too high, and that this could leave substantial gaps in the ability to respond to pest outbreaks. This concern was especially acute for growers of low acreage crops, for vector control personnel, and for others whose pesticide purchases might not be sufficient to allow manufacturers to economically cover the new regulatory costs. The new law responded to the risk that small pesticide markets might face critical shortages in their pest control toolboxes through several new mechanisms, including support for the development of Pest Management Strategic Plans or PMSP's. PMSP's are intended to serve as formal mechanisms for growers or other IPM practitioners to communicate their pest management practices and challenges, and in particular, any critical shortfalls in available pest control tools, to regulators, to researchers, and to funders (see ipmcenters.org/pmosp/). PMSP's are created with the support of USDA's Office of Pest Management Policy (OPMP) and the Regional IPM Centers, and they have been popular and effective. Until recently, almost all of the 100 PMSP's have been developed by agricultural commodity groups, but recent Notices of Cancellation of registration for significant public health pesticides have led to an effort, initiated by IR-4, to prepare a Mosquito Control PMSP.

The FQPA addresses: vector control and public health pesticides (PHP's) as a specific pesticide "minor use", provisions for a Public Health Coordinator within the Office of Pesticides Programs, requirements that public health consequences be considered in regulatory decisions involving PHP's, and an authorization for potential federal funding if the costs of new data requirements caused registrants to pull PHP's off the market. Since the Act's passage, however, these provisions were not directly put to the test until recently, when the registrants of resmethrin, a pyrethroid used to control adult mosquitoes, and temephos, an organophosphate larvicide, announced that they could not afford the data-call-in (DCI) expenses associated with re-registration of their materials

(edocket.access.gpo.gov/2010/pdf/2010-11697.pdf; edocket.access.gpo.gov/2010/pdf/2010-1583.pdf). Vector control practitioners, represented primarily by the American Mosquito Control Association (AMCA), the Centers for Disease Control and Prevention (CDC), and the IR-4 Public Health Pesticides Program, submitted numerous comments and letters on the proposed cancellations, focusing on the small number of registered PHP's and the need to protect them generally, as well as providing in-



formation on use patterns and extraordinary attributes of these specific chemicals. However, efforts to secure an appropriation of federal funds to generate the data required by the DCI's have been unsuccessful, perhaps not surprisingly given current budget challenges. Proposals to satisfy the DCI's with existing data or to justify waivers from some data requirements have been prepared, but it is not now clear whether these proposals will be accepted, whether the materials will in fact disappear from the tool box, or whether there will be some other outcome.

Resmethrin and temephos are not the only mosquitocides that have faced regulatory scrutiny in recent decades, from state or local as well as federal authorities. Many carbamates and organophosphates have been taken off the market and mosquito larvicidal oils are increasingly scarce and scrutinized. While new control tools have also entered the market during this period, the loss or potential loss of well-known, reliable products has caused significant uncertainty in many corners about whether needed tools will be available in years to come not only for routine operations against familiar pests, but also to respond quickly and effectively to introduced mosquito species, disease outbreaks requiring high vector control efficacy, resistance to standard pesticides, budget cuts, or a number of other foreseeable challenges.

In light of these challenges and questions, IR-4 approached OPMP and AMCA early in 2011 to discuss the feasibility of developing a Mosquito Control PMSP similar to those in agriculture. Specifically, there is a need for an inventory of the chemical tools that are available or under development, a review of their limitations and the regulatory challenges facing them, and a presentation of priorities for research, regulatory assistance, funding, and training. These discussions led to a series of subsequent workshops, and has demonstrated that there is significant interest in the idea. Current plans include a final work-group meeting in late October, and a draft PMSP for public comments for release in early 2012.