

Perspective

Communicating Insecticide Resistance to Farmers

By Russell Slater

IRAC



Task teams, mobile device applications and videos are just a few of the newer tactics adopted by the [Insecticide Resistance Action Committee](#) (IRAC)* in order to reach, educate and collaborate with those who need the information most – growers. IRAC works to prolong the effectiveness of insecticides, acaricides (for spiders, ticks and mites) and insect-active biotech traits by developing and promoting insecticide resistance management (IRM) strategies.

Promotion of IRM to a wide group of stakeholders has always been the focus of IRAC since it was formed in 1984 and the organization has published a wide range of materials on the causes of resistance and strategies to manage it. Historically, as a cross-industry group, IRAC provided information to scientific organizations, research institutes and companies – those who already understood resistance management. But today, IRAC's emphasis is increasingly to provide practical IRM recommendations to farmers and urban pest controllers and promote their implementation in the field in cooperation with national CropLife associations and local stakeholders.

In order to get regional- and country-specific recommendations, IRAC has adopted a strategy of holding local “task team” workshops. The first of these was held in Brazil in early 2015. This was aimed at developing IRM recommendations for the region's three major crops (cotton, soybean and corn) in conjunction with local stakeholders, including the Brazil Ministry of Agriculture, scientific advisory groups and universities. The stakeholders helped determine the current status of IRM, how best to tackle it and provide a single set of recommendations for promotion in the field. Similar workshops will be held in other regions across the world.

With more direct communication in mind, IRAC is developing a leaflet explaining the basic principles and benefits of IRM in non-scientific language that is easy to understand. The leaflet will be distributed to crop protection dealers, extension professionals and other stakeholders, who have direct contact with farmers. It will also be used within training programs on Integrated Pest Management, which are regularly undertaken in dozens of countries each year.

The template will be made available on IRAC's website, where IRAC member companies, CropLife national associations and other stakeholders can download and translate it into local languages, increasing the reach even further.

On the multimedia front, IRAC developed an online tool to identify an insecticide's mode of action. Users search by chemistry to determine the product's mode of action group and ensure that the next product applied is a different classification than the last – an important principle of IRM. In order to simplify access for advisors and farmers, this tool is also available as a mobile application on a tablet, iPhone or Android device. Along with appropriate training to understand resistance and its management, the online tool helps to ensure the widespread adoption of IRM.

A short cartoon video is soon to be launched explaining how insect resistance occurs and can be managed. The video provides basic information and warns against the larger dangers of product resistance – beyond the field to household pests, for example – with the goal of promoting IRM to growers and urban pest controllers.



Mode of Action online tool

These types of initiatives are helping to address IRAC's biggest challenge: communicating IRM messages to millions of smallholder farmers. IRAC's website houses an extensive library of posters, presentations and other materials, and the organization continues to actively communicate with scientists and the industry. But to reach growers – those who make the most difference when it comes to IRM – speaking their language in direct ways is critical. To address this, CropLife International and its regional and national associations, along with IRAC, continue work in partnership with other stakeholders to provide information, training and support to farmers. 💧

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*IRAC is a CropLife International expert group. Its members are BASF, Bayer CropScience, Cheminova, Dow AgroSciences, DuPont, FMC, Makhteshim Agan, Monsanto, Nihon Nohyaku, Nufarm, Sumitomo Chemical, Syngenta and Vestergaard Frandsen.