



International Association for the  
**PLANT PROTECTION SCIENCES**

IAPPS

**NEWSLETTER**

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## **WARM WELCOME TO OUR NEW GOVERNING BOARD MEMBER !**

It is my pleasure to announce that the Executive Committee of the IAPPS Governing Board has appointed **Dr. Virender Kumar** as IAPPS coordinator for Region XI: Southeast Asia.



Dr. Virender Kumar is currently Senior Scientist and Cluster Leader – Adaptive Agronomy and Pest Ecology – within the Sustainable Impact Platform at the International Rice Research Institute (IRRI), Los Baños, Laguna 4031, Philippines. He is a weed scientist by training, and obtained his PhD in Weed Science from Cornell University, Ithaca, NY, USA, in 2008, his MSc in Agronomy in 2002 and BSc in Agriculture in 1999, both from C.C.S. Haryana Agricultural University, Hisar, India

His main research focus is in developing sustainable intensification solutions of crop and cropping systems and integrated weed management of

rice-based systems in South and Southeast Asia. This is achieved by combining process-based agronomy and integrated weed management in novel production systems, including those based on the principle of conservation agriculture as well as adaptive solutions for coping with climate extremes and resource limitations.

Besides leading the ‘Adaptive Agronomy and Pest Ecology’ cluster of Sustainable Impact Platform of IRRI (June 2019 to Present), Virender is also leading the IRRI’s research and development program on innovative crop and natural resource management to manage weeds in intensive and diversified rice-based systems in South and Southeast Asia (March 2015 to Present), as well as several regional projects and consortia focusing on integrated weed management.

Virender has published the results of his studies in more than 150 scientific communications, including 50 articles in peer reviewed international journals.

Please join me in welcoming Virender to the IAPPS GB and family. On behalf of the IAPPS GB, I would also like to thank the outgoing coordinator, Dr. Buyung Hadi, for his dedication and valuable contributions to IAPPS as coordinator for Region XI: Southeast Asia.

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## **RESISTANCE MANAGEMENT: PLANT SCIENCE INDUSTRY PERSPECTIVE**

The development of resistance by pests may occur with all classes of pesticides (fungicides, herbicides, insecticides, rodenticides, *etc.*). This results in a loss of effectiveness of products and can occur with chemical and biological pesticides – although the development of resistance with the latter is generally slower. The resulting loss of pest control can result in farmers increasing dosages or spray frequency adding to the risk of high residues, as well as, failure of control. The research-based multinational plant science industry, represented by CropLife International, recognize this as an issue that needs to be addressed, to ensure that many of the essential tools of pest management are to be maintained.

CropLife International and its members (including BASF, Bayer, Corteva Agriscience, FMC, Sumitomo Chemical and Syngenta) promotes integrated resistance management across the world through advocacy and as part of their training programs. This is based on the technical advice of its specialized teams:-

- FRAC – the Fungicide Resistance Action Committee <http://www.frac.info>
- HRAC – the Herbicide Resistance Action Committee <http://www.hracglobal.com/>
- IRAC – the Insecticide Resistance Action Committee <http://www.iraac-online.org>
- RRAC – the Rodenticide Resistance Action Committee <http://www.rrac.info>

The overall strategy is:-

- Adoption of an Integrated Pest Management Strategy, where a range of options for pest management are used
- When pesticides are used, following the dose recommendations on the product label
- For fungicides, herbicides and insecticides using products with different mode/site of action (Mode of Action – MOA rotation).

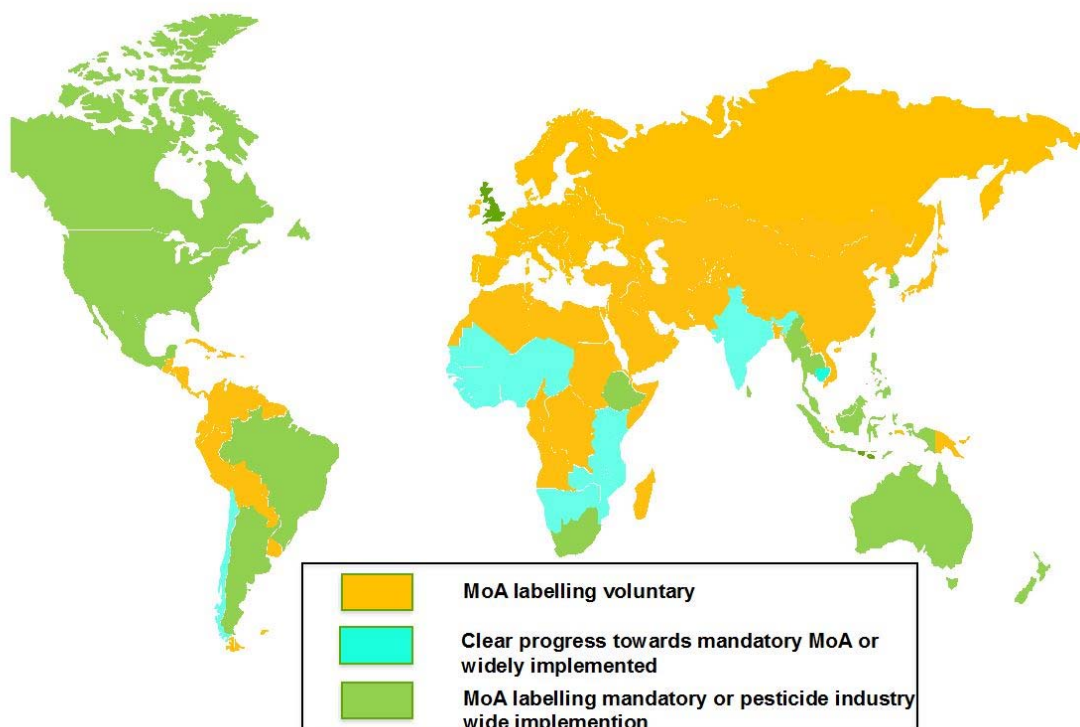
With regard MOA rotation, FRAC, HRAC and IRAC agree MOA classification (how the product works), assign a number (MOA code) to the product to designate the MOA and publish this on their websites (it is worth noting that HRAC have recently changed their classification to align

with the Weed Science Society of America and now use a number designation instead of the letter previously used). However, this information needs to be easily accessible to farmers. CropLife International therefore recommends that all products should include the MOA code on the label. As a first step all CropLife International member companies will include the MOA code on the label of their products as part of the registration/re-registration process. This should be completed by 2023.

To be fully effective, products from all manufacturers should include the MOA code on their labels and thus CropLife International advocates for this to become an agreed, voluntary practice by all of the crop protection industry, or mandated by regulation. This is a job in progress and guidance for labelling can be found at

<https://croplife.org/wp-content/uploads/2018/02/MoA-Labeling-Guidance-FINAL.pdf>.

The current global situation regarding MoA labelling is summarized in the map below.



Further detailed information on resistance management strategies and resources materials for training can be found on the websites of CropLife International (<https://croplife.org/crop-protection/stewardship/resistance-mangement/>) and the RACs.

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**IAPPS Mission: to provide a global forum for the purpose of identifying, evaluating, integrating, and promoting plant protection concepts, technologies, and policies that are economically, environmentally, and socially acceptable.**

**It seeks to provide a global umbrella for the plant protection sciences to facilitate and promote the application of the Integrated Pest Management (IPM) approach to the world's crop and forest ecosystems.**

**Membership Information: IAPPS has four classes of membership (individual, affiliate, associate, and corporate) which are described in the IAPPS Web Site [www.plantprotection.org](http://www.plantprotection.org).**

**The *IAPPS Newsletter* welcomes news, letters, and other items of interest from individuals and organizations. Address correspondence and information to:**

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