## IAPPS NEWSLETTER

Number II March, 2000

## Message from the President of IAPPS

The creation of the IAPPS could not have come at a better time, the start of the new millennium and the threshold of a new era in plant protection.

In the past millennium, we have brought agricultural production to unsuspected highs, thanks to sustained research efforts and farmer ingenuity and resilience. The public sector has contributed to a large extend to the research efforts, and only in the last couple of decades did the private sector take on a larger overall role. In the plant protection sector, the last 50 years of the XXst Century have been marked by the introduction of integrated pest management (IPM) that lead to substantial reductions in pesticide applications to the major crops around the world. For the development of IPM, Drs. R. Smith and P. Adkisson received the World Food Prize in 1997. After having realized both the potential benefits and the potential dangers of using pesticides, the arrival of IPM gave the farmers and consumers, as well as all citizens who care for their environment, reasons for hope. IPM had its ups and downs over the last 50 years, as the interpretation and application of its principles were often guided by commercial rather than scientific considerations. Nevertheless, IPM has had remarkable successes, and there is still potential to improve on the level of implementation through renewed research undertakings. IPM has also brought plant protection to the attention of policy makers and heads of states, a welcome fact in many countries, in particular the developing ones, where pesticides were (sometimes still are) overused, not to mention the use of banned products. There is, however, room for more sustained efforts in the developing countries, in particular from the regulatory, policy making bodies, but then also from the global agro-chemical and life science industry itself. Maximum residue levels imposed by governments are just one, albeit most important, component of a wider strategy to widely implement IPM principles in plant protection.

The world is still losing some 40% of its production to pests, diseases and weeds, this after years of research and the application of large amounts of plant protection chemicals. Thus the solution to reduce the losses, and provide the needed extra food for the years to come, may lay in preventing the damages in the first instance, rather than the application of curative treatments. This is where I see much more of the plant protection sciences in action in the new millennium. Good plant protection starts with good seeds, healthy and well nourished plants, in a healthy environment, free of invasive species. The plant protection sciences must encompass a wider area than entomology, pathology, weed science and plant breeding. Its is time that system's ecologists. agronomists, economists, social scientists are fully integrated into IPM teams, helped along by insect ecologists, physiologists, taxonomists and behaviorists, plant physiologists and ecologists, botanists and others. We need to research and implement the much-talked about holistic approach to food, fiber and feed production. The latest trend to provide farmers with seeds that "include it all genes to fight off pests, make chemical weed control easy, is a step backwards from IPM and the progress made in taking the bigger picture into our operational frame. It is doubtful if genetic engineering, with its promises, will ever be able to deliver the sustainable pest management tools farmers are looking for. Although many potential useful solutions in terms of pest management could come from genetic plant manipulations, one needs to keep in focus the fact that these plants will grow in diverse environments, and are subjected to a score of constraints. These diversities require plants with broad adaptation power, resilience and readiness for the unpredictable. The best way to achieve this is with a broad genetic background and a farming system approach that respects the plants needs for a healthy and vigorous growth. Under these circumstances, yield potentials will be realized to their fullest, while pests will be kept at their minimum. Genetically modified plants, be it through gene manipulations or "classical" breeding are just one tactic of an IPM strategy. To ignore this fact, and concentrate most if not all research efforts in that area will not lead to the expected goals of prevention over cure in terms of pest management. There is much more research needed in IPM, and I would like to urge all the plant protection scientists to broaden their approach to pest management again. This will broaden again the reductionist and molecular trend of the last decade, which has already dangerously narrowed down the options available to the farmers.

The IAPPS is a policy influencing tool at our disposal to help research and its implementation move in the right direction, that is in a as broad as possible way, without loosing sight of the main objective of solving the yield loss problems, both pre and post harvest. Farmers need to achieve good yields, but most importantly, they need stable and predictable yields, consumers need wholesome and residue free food. Through good public and private science that is lead by both economical and environmental considerations, the goal of minimizing losses to pests can be achieved without mortgaging our future. Like any organization, the IAPPS will be only as successful as its members want it to be. As president, I will represent all parties of the IAPPS that work towards sound and sustainable IPM solutions for all farmers. I would like to particularly invite the main organizations in the plant protection sector to join the IAPPS, and make it a strong and broadly represented organization. With your support and together with the Executive Committee, we all can help shape the future of plant protection in a framework that takes into account the needs of

?

the farmers, the consumers and our planet.

Hans R. Herren

[Printed in Crop Protection 19: 141-142]