

# INNOVATION IN AGROCHEMICAL DISCOVERY AND DEVELOPMENT

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The application of agrochemicals to protect crops is an established part of conventional agricultures and has provided increased yields and economic benefits over many years. In modern agriculture, “IPM” and “sustainable agriculture” are key words. In the FAO definition of IPM in 1966<sup>1)</sup>, environmental impact of agrochemicals was not paid much attention. With the increased awareness of the environmental impact of agrochemicals, IPM itself has changed (evolved) to establish strategically various methods with the progress of science (new agrochemicals, biotechnology and so on). But we know that agrochemicals have played and will play an important role in past and future sustainable agriculture.

At the 1992 UNCED Earth Summit in Rio and at the 1996 FAO World Food Summit<sup>2)</sup> “Sustainable agriculture” was discussed in order to feed a growing world population in an environmentally and socially sensitive manner, maintaining farmer’s natural resource base for future generations.

Many innovations for the sustainable agriculture have been brought about to protect crops and increase their yields, crop rotation, crop selection, fertilizer, chemical control, biological control, physical and mechanical control, transgenic crop and so on. Integrated Pest Management (IPM) and Integrated Crop Management (ICM), which are playing an important role on modern and future agriculture for crop production, are strongly based on these technologies and methods.

At this workshop several innovations of agrochemicals and their relating technologies in Japan will be shown and discussed in connection with their risk reduction and the sustainable agriculture.

## References:

- 1) FAO (1966) report of the FAO/UNEP panel of experts on integrated pest control 1965, Rome Part 1. 91pp; Part 2, 186pp; Part 3, 129pp
- 2) FAO(1996) World Food Summit ; [http://www.fao.org/WFS/INDEX\\_EN.HTM](http://www.fao.org/WFS/INDEX_EN.HTM)