

Challenges in Achieving 50% Reduction of Pesticide Use under the MIDORI Strategy

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Summary

To establish a sustainable food system, the Ministry of Agriculture, Forestry and Fisheries (MAFF) launched the MIDORI Strategy in 2021. This medium-to-long term initiative promotes innovation to reduce the environmental burden across the entire food system, from input to consumption through innovative practices. Among its key challenges, reducing chemical pesticide use is a major target for achieving sustainable food production. The MIDORI Strategy sets ambitious numerical goals: a 50% reduction in risk-weighted use of chemical pesticides and an increase in organic farming to 1 million hectares by 2050. A key approach to achieving these goals is the widespread adoption of Integrated Pest Management (IPM). However, Japan's declining and aging farming population presents significant obstacles to implementing the three fundamental steps of IPM, namely, prevention of pest outbreaks by optimizing cropping conditions, decision making based on appropriate prediction, and implementation of diverse control methods, including the responsible use of chemical pesticides. This presentation will introduce R&D activities that support the practical adoption of IPM by farmers, thus facilitating steady progress towards achieving the pesticide reduction targets of the MIDORI Strategy by 2050.