Evaluating Biological variation in Non-transgenic Crops and Capability of the Application of Omics Methods to Safety Assessment

REIKO TESHIMA, Ph.D. Head of the Division of Novel Foods and Immunochemistry, National Institute of Health Sciences, Japan

< Summary >

The International Life Sciences Institute Health and Environmental Sciences Institute Protein Allergenicity Committee hosted an international workshop November 16-17, 2009, Paris, France, with over 60 participants from academia, government, and industry to review and discuss potential utility of "-omics" technologies for assessing the variability in plant gene, protein, and metabolite expression. In this report, the discussion points of the workshop were summarized and proteomic analysis method of rice proteins by 2D-DIGE (Two-dimensional fluorescence difference gel electrophoresis) was introduced as one example of the "-omics" method.