

Session III Lecture 1

Towards sustainable disease control for soybean in South America

Dr. KASHIWA Takeshi

Senior Researcher, Biological Resources and Post-harvest Division, Japan International
Research Center for Agricultural Sciences

Summary

Soybean is one of the most important crops. South American countries such as Brazil, Argentina, and Paraguay are known as main producers for world soybean market. In soybean fields of South America, fungal diseases such as Asian soybean rust damage its production in every year. Protecting soybean from such devastating diseases is important for global food security. However, the pathogen of rust disease develops high degree of fungicide resistance, and more, overcomes several rust resistant soybean varieties. Also, long distance of spore migration of this pathogen makes disease control difficult. To solve such transboundary plant disease problem, we are working as a 'hub' for plant disease research network. Based on collaborations with national research institutions in South America, we developed soybean varieties with high resistance against soybean rust by a gene-pyramiding strategy. We also studying on another important disease, *Cercospora* leaf blight, to achieve sustainable control for soybean diseases in South American countries.