
Oral sessions | Field Crop Production | O11: Direct-seeded Rice in Asia-Oceania Region

[O11] Direct-seeded Rice in Asia-Oceania Region

Chair: Yoichiro Kato (The University of Tokyo, Japan)

Chair: Virender Kumar (International Rice Research Institute, Philippines)

Thu. Sep 9, 2021 9:45 AM - 11:45 AM Room 1 (Oral) (Field Crop Production)

10:25 AM - 10:40 AM

[O11-03] Research and Development of Direct-Seeded Rice in China

(Invited Speaker)

○Shaobing Peng (College of Plant Science and Technology, Huazhong Agricultural University, China)

As labor scarcity for rice production is intensifying in China, a major shift in rice establishment is happening from seedling transplanting to direct seeding. As result, the planting area of direct-seeded rice (DSR) has increased from 1.5 to 9.2 million hectares from 2008 to 2018, which corresponded to an increase in the percentage of DSR to the national rice planting area from 8% to 30% over the same period. This expansion of DSR mainly occurred for the middle-season rice in Middle and Lower Reaches of the Yangtze River (MLYR). There is still room for the further expansion of DSR in MLYR because double-season rice in this region is usually transplanted due to limited thermal time. To shift from transplanting to direct seeding for double-season rice in MLYR, varieties with ultra-short duration (approximately 95 d in both early and late seasons) are needed. In the past eight years, we evaluated varieties with ultra-short duration and identified 6 parents for developing new varieties with ultra-short duration for direct-seeded, double-season rice in MLYR. The entire procedures of crossing and selection were conducted under DSR conditions through a shuttle breeding between Hubei and Hainan Island. New varieties with desirable traits became available in 2019 for agronomic evaluation. In 2021, we have started on-farm evaluation on these materials. The overall performance of these new varieties and the feedback from the farmers will be discussed in the presentation.