

Evaluation of yielding ability of the newly selected lines of rice developed under the Co-operative Breeding Program between Japan and P. R. China.

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The newly selected lines of rice developed under the co-operative breeding program between Japan and P. R. China were analyzed in relation to their dry matter production and their yielding ability was evaluated. The maximum potential yield was also estimated based on the parameters analyzed.

The results are summarized as follows;

1. The grain yields were markedly reduced by the low seed set percentage which was caused by the low cold tolerance at the booting stage.
2. The yield capacity was high but the actual sink size was small due to the high degree of sterility.
3. The newly selected lines were considered to have a high yielding ability due to their large yield capacity and large amount of filling substances especially in terms of dry matter increase from the full heading stage to harvest.
4. The maximum potential yield of rice grains was estimated at 930g per meter based on the parameters analyzed, provided the cold tolerance and other traits are improved.