



外国出張報告書

平成 26 年 3 月 30 日

1. 出張国名 フィリピン
2. 出張月 平成 26 年 2～3 月
3. 出張目的 亜鉛欠乏耐性に関する遺伝生理学的要因の解明とその育種利用等に関する視察及び共同研究の準備のため。: B

4. 成果の概要

An experiment aiming to elucidate the physiological mechanism involved in the tolerance to Zn deficiency in soil was conducted at IRRI facility from 2014 Feb to March.

A set of tolerant and intolerant rice genotypes were grown either in Zn deficient or sufficient soil. Seedlings were sampled at the 1st, 2nd, 3rd, and 4th week after transplanting. Phenotypic parameters such as plant height, root length, and dry matter were measured.

Two representative roots per genotype were further characterized by counting their root number and subsequently the roots were stained and scanned. Roots were classified into fine, main and lateral based on their diameter, and their total surface area estimated using the Winrhizo software.

The obtained data will be used for establishing the association between the genotype root traits (total length and surface area) and their tolerance to Zn deficiency.

In addition, I have participated in the evaluation of genotypic variation in order to find promising loci associated with enhanced seedling vigor, using Genome-Wide Association Studies (GWAS)