

論文審査の要旨  
Summary of Dissertation Review

博士の専攻分野の名称 Degree	博 士 (農学)	氏名 Author	PHAM THI THU HA
学位授与の要件	学位規則第4条第①・2項該当		
論 文 題 目 Title of Dissertation	Application of Marker-Assisted Selection for Breeding Drought-Tolerant Rice( <i>Oryza sativa</i> L.) in Vietnam		
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〔論文審査の要旨〕 Summary of Dissertation Review			
<p>The present research was conducted to examine (i) correlation among agro-morphological variation and genetic diversity of rice under drought stress, (ii) physical-chemical character and heritability for yield components in rice, (iii) yield traits in F<sub>2</sub> generation and molecular approach for breeding rice tolerant to drought and submergence, and (iv) development of drought tolerance rice lines using marker-assisted selection in Vietnam.</p> <p>The genetic variation in drought response among rice germplasm was clarified and donors in breeding rice integrated with drought tolerance and good quality traits were selected. The number of filled grains/panicles and harvest index showed strong and direct positive correlation with grain yield. This research also successfully introduced both OM6162/Swanasub1/OM6162, and OMCS2000/5499-73-1-B/OMCS2000 populations. The associations between traits of interest yield potential, drought tolerant characteristics, and genetic markers using diverse genetic background were achieved. There were two rice lines (BC<sub>2</sub>F<sub>2</sub>-45 and BC<sub>2</sub>F<sub>2</sub>-54) were bred and they were promising for breeders to release as new cultivars in Vietnam.</p> <p>Several microsatellite primers were selected for Marker-Assisted Selection were selected, including RM201, RM105, RM219, RM23602, RM23877, RM24103, and RM328 showed the linkage to drought tolerance genes on the chromosome 9. They appeared as an efficient tool for rice breeders to select parent lines for breeding rice cultivars tolerant to drought.</p> <p>The examined committee agreed that the applicant is fully qualified to be awarded the degree of Doctor of Agriculture.</p>			