## 論文審査の要旨

Summary of Dissertation Review

博士の専攻分野の名称 Degree 博士 士	(農学)	氏名 Author	TRUONG THI TU ANH	
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				
Phenotypic Variation, Genetic Diversity, and Segregation of Vietnamese Rice Mutants				
論文審査担当者 Dissertation Committee Member				
主 查 Committee Chair Tran Dang Xuan, Associate Professor, Graduate School 印				
for International Development and Cooperation,				
	Hiroshima University Teruo Maeda, Professor, Graduate School for			
審查委員 Committee	International Development and Cooperation,			
	Hiroshima University			
審查委員 Committee	Masaoki Tsudzuki, Professor, Graduate School for			
	International Development and Cooperation,			
	Hiroshima University			
審查委員 Committee	Lee Han Soo, Associate Professor, Graduate School for			
	International Development and Cooperation,			
	Hiroshima University Tetsuro Hosaka, Associate Professor, Graduate School			
審查委員 Committee	for International Development and Communication			

〔論文審査の要旨〕 Summary of Dissertation Review

The applicant dissertation entitled: "Phenotypic Variation, Genetic Diversity, and Segregation of Vietnamese Rice Mutants" and included 5 Chapters. Of which: Chapter 1: General introduction. Chapter 2: Phenotypic variations of rice mutants. Chapter 3: Genetic diversity of rice mutants. Chapter 4: Maternal inheritance of rice mutant. Chapter 5: General discussion.

Hiroshima University

for International Development and Cooperation,

This research has applied the chemical *N*-Methyl-*N*-Nitrosourea (MNU) to create mutation on different rice cultivars originated from Vietnam. The variation in phenotypes and genetic diversity were analyzed to search for elite characteristics induced by MNU mutation and bred new rice lines with elite agronomic characteristics. Especially, the Chapter 4 described a new finding of maternal inheritance (mother cultivar) to obtain important agronomic traits such as rice yield, quality, pest and disease resistance. This novel method has helped to shorten time for breeding new rice cultivars, especially in developing countries, thus contributed to the sustainable development of rice production. From results obtained by this research, the applicant has published 3 scientific papers in international journals, of which 2 journals are indexed in Web of Science (MDPI, Agriculture and Sustainability, IF 2.075). The applicant has revised and incorporated all suggestions and comments by members of the examined board, including revising the tittle of the research.

After evaluating the dissertation thesis and achievements of this study, the examined board concluded that the applicant passed the exam and recommended to obtain the degree of Doctor of Agriculture.