

# THE DIVERSITY OF SOME LOCAL UPLAND RICE CULTIVARS IN NORTHERN OF VIETNAM

Chu Hoang Lan, Nguyen Tuan Anh, Chu Hoang Mau\*

## TÓM TẮT:

Droughts have been occurring commonly in the recent years while upland rice became potential crops because of its high drought tolerance. In this study, we have evaluated the diversity of some local upland rice cultivars in Northern Vietnam in order to preserving and developing the genetic resources of upland rice. Forty seven local upland cultivars were collected from mountainous provinces in Northern Vietnam and classified into two subspecies: indica (33 cultivars) and japonica (14 cultivars). We have evaluated the diversity of these cultivars by studying some morphological and qualitative characteristics of grains. Out of these 47 cultivars, 12 cultivars were selected to evaluate the genetic diversity by RAPD technique. The genetic similarity and different coefficients of these cultivars were determined by using NTSYSpc-2.02i program. The dendrogram is established with four groups and the genetic distances between cultivars range from 7.69% to 34.0%. The genetic diversity coefficient of these cultivars is 52.37%. The reactivity for drought of these 12 upland rice cultivars was shown in the diversity of drought tolerant phenotype. These cultivars were divided into 4 groups according to the relative drought tolerance index. The difference coefficients range from 1.003% to 9.394% and the phenotypic diversity coefficient is 73.15%.