

KHA'NĂNG CHỊU HẠN CỦA MỘT SỐ GIỐNG LŨA CẠN ĐỊA PHƯƠNG (ORYZA SATIVA L.)

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TÓM TẮT:

Increased drought in many parts of the world is a major cause of promoting the projects and researches to develop drought-resistant crops with high productivity. A great deal of researches focused on identifying morphological characteristics, biochemical and physiological parameters. Besides, studies on the nature of drought tolerance at the molecular level have been scientists' interest. Drought tolerance of 25 local upland rice varieties at the seedling stage was identified, wherein Giang Bau was found to show the best drought tolerance variety while Khau lay khao exhibited lowest degree of drought tolerance. The use of RAPD marker with 20 random primers revealed genetic relationship of 25 local upland rice varieties with the coefficients of similarity among upland rice cultivars ranging from 79% to 92%. LTP coding genes of two local upland rice varieties with different drought resistance was isolated and identified. The comparison and analysis of LTP gene sequences among two local upland rice varieties (Giang bau and Khau lay khao) and a Japanese rice variety (Yukihikari) showed that the genetic similarity of LTP gene sequences between Yukihikari and Giang bau is 100% and the genetic similarity of LTP gene sequences between Giang bau and Khau lay khao is 98.1%. Comparing amino acid sequences of LTP proteins among these three varieties showed an increase of amino acid valine residue in Khau lay khao's LTP protein and an increase of the amino acid leucine residue in Giang bau's LTP protein.