

Expression of Interest Abstract

Title: GENETIC ANALYSES OF NON-GMO HIGH PROTEIN RICE

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Short Abstract:

Genetic analyses of non-GMO high protein rice lines were conducted through genetic mapping using single nucleotide polymorphism (SNP) markers and by direct comparisons of the DNA sequence of two main genes coding for Aspartate Kinase and Dihydrodipicolinate Synthase. These two enzymes control the production of lysine biosynthesis. Three groups of high protein rice lines and their original parental line from which they were derived we used in the analyses. Unique genetic properties associated with high protein rice line provide basic understanding of high protein content found in the rice grain.