RESULTS OF EVALUATING SOYBEAN PROMISING LINES CREATED FROM DT2008 SOYBEAN VARIETY THROUGH GAMMA (Co\(^{60}\)) IRRADIATION

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Summary

With the aim of improving the lodging resistance of soybean variety DT2008, Agricultural Genetics Institute applied the mutation method of Co\(^{60}\) gamma irradiation and selected 8 promising lines on M\(_6\) by pedigree method. These lines were evaluated on the field trials in three crop seasons (spring, summer and winter) in Dan Phuong – Ha Noi 2015. The results showed that these lines had better characteristics of yield, disease and lodging resistance than the control DT84’s with the mild infection of rust, downy mildew, powdery mildew (point 1), good lodging resistance and high yield. Compared to the origin DT2008, they had the same high yield, disease and lodging resistance except three lines of 08200-26/11 with black seed, 08200-2/8 with 11.5 – 17.4 cm shorter stem height and 08200-25/24 with 5-8 days shorter growth duration. All three lines are considered promising in the production with the yield of 2.44 – 3.18 tons/ha depending on each crop season.

Keywords: Mutation, soybean, DT2008, gamma Co\(^{60}\).