

Studies on the Occurrence of Hard Seeds in Adzuki Bean

II. Influences of Drying Agent¹

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ABSTRACT

The seed quality of adzuki beans could be lowered by the presence of hard seeds. Drying agent such as Paraquat was usually applied to adzuki bean plant before harvesting for leaf-drying purposes which could be helpful for increasing the harvesting efficiency of bean harvester. The objectives of this experiment were aimed to study the effects of application time and concentrations of leaf-drying agent on the, leaf drying, yield components, mechanized-harvesting efficiency, and occurrence of hard seeds for adzuki beans. Results showed that the leaves of adzuki bean were dried by the application of drying agent. The yield components such as pod weight, number of seeds per pod, seed weight per pod were not significantly affected by the application of drying agent. However, the application of drying agent will result in the increasing of hard-seed rate. The earlier the application and the higher the concentration of drying agent, the higher the occurrence of hard seeds in adzuki bean. Also, the contamination of dry leaves or stems in adzuki bean seed during the harvesting process of bean harvester was significantly reduced by the application of drying agent.

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