

Studies on the breeding for sprout resistance in Japonica rice variety

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An automatic sprinkler was set up watering to the panicle with 10-15 minutes intervals in a given consecutive 7 days then the panicle sprout rate was determined. The result revealed that the panicle sprout rate in semidwarf Indica rice was lower than those of japonica one. The germinated rate in all tested varieties increased with increasing days of exertion panicle. There is a significant difference in sprout rate of panicle between the resistant and susceptible variety. This performance was controlled by the genotypic difference. The F_2 and F_3 segregation showed the characteristic of panicle sprout was complicate in terms of heredity model.

A total of 186 lines which having 30% below of panicle sprout rate was selected for the further test in the next rice crop.