

## Chemical control of Adzuki bean damping-off disease

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### Abstract

Adzuki bean (*Vigna angularis*) is planted mainly in the Kaohsiung and Pingtung areas between mid-September and mid-October. When sowed adzuki bean encountering rain or wet soil, the seedlings are susceptible to infection by *Rhizoctonia solani*, causing root rot, and severe deaths. Once the stem or root of the plant is damaged, fungicides are usually not useful for disease control. In order to test the effect of pretreatment of adzuki bean seeds on the control of damping-off, several fungicides were used to test the mycelial inhibition ability against *R. solani*. After testing the control efficacy of these fungicides against the damping-off disease in the greenhouse, flutolanil and fluxapyroxad+pyraclostrobin were selected for adzuki bean seed treatment and field trials. Tolclofos-methyl was used as a positive control agent, while no fungicide treatment served as a negative control. The results showed that the germination rate of seed treated with flutolanil and fluxapyroxad+pyraclostrobin in the field was twice more than that of the no fungicide control.

Key words: adzuki bean, *Rhizoctonia solani*, damping-off disease, chemical control

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