

Grassy Stunt Disease of Rice: Symptoms, Disease Cycle, and Management

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| Disease Name | Rice Grassy Stunt Disease (RGSV) |
| Common Name | Rice Grassy Stunt Virus (RGSV) |
| Pathogen | Viral |
| Vector | Brown Planthopper (BPH) |
| Transmission | Feeding on infected plants and carrying the virus to healthy ones |
| Symptom Highlights | Severe stunting, excessive tillering, grassy and rosette appearance, abnormal leaf characteristics, rusty spots and blotches, green color retention with nitrogen fertilizers, survival without panicle formation |
| Impact on Plant Growth | Significant stunting, reduced plant height, dense and grassy appearance, upright growth habit, bunchy look, yellowish-green leaves with small rusty spots, failure to produce panicles |
| Disease Cycle | Complex interaction between virus and the vector, brown planthopper. Long-winged adults play a significant role in transmission. The virus has a latent period in the vector. Ratoon crop and vector presence can perpetuate the disease. |
| Management | Use of Izumonas - Plant growth-promoting rhizobacteria (PGPR) to enhance plant defense mechanisms. Use of Izuraid - Biotech research product for insect pest control. Modes of use include seed treatment, seedling treatment, soil application, and foliar application. |