

RICE PESTrivia!





REMagbitang



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SHEATH BLIGHT

Causal Organism:

Rhizoctonia solani

Causal type:

Fungi

Growth Stages Affected:

Tillering to heading stage

As a result, the leaf area of the canopy can be significantly reduced by the disease. This reduction in leaf area, along with the disease-induced senescence of leaves and young infected tillers, are the primary causes of yield reduction.



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HOW TO IDENTIFY?

Early symptoms usually develop on the leaf sheaths at or just above the water line as circular, oval or ellipsoid, water-soaked spots which are greenish-gray in color.



Lesions on the leaves usually have irregular lesions, often with gray-white centers and brown margins as they grow older.



The disease may move up the plant and infect the flag leaves and panicles under severe conditions. The fungus can spread into the culms from early sheath infections and weaken the infected culms, resulting in the lodging and collapse of tillers.

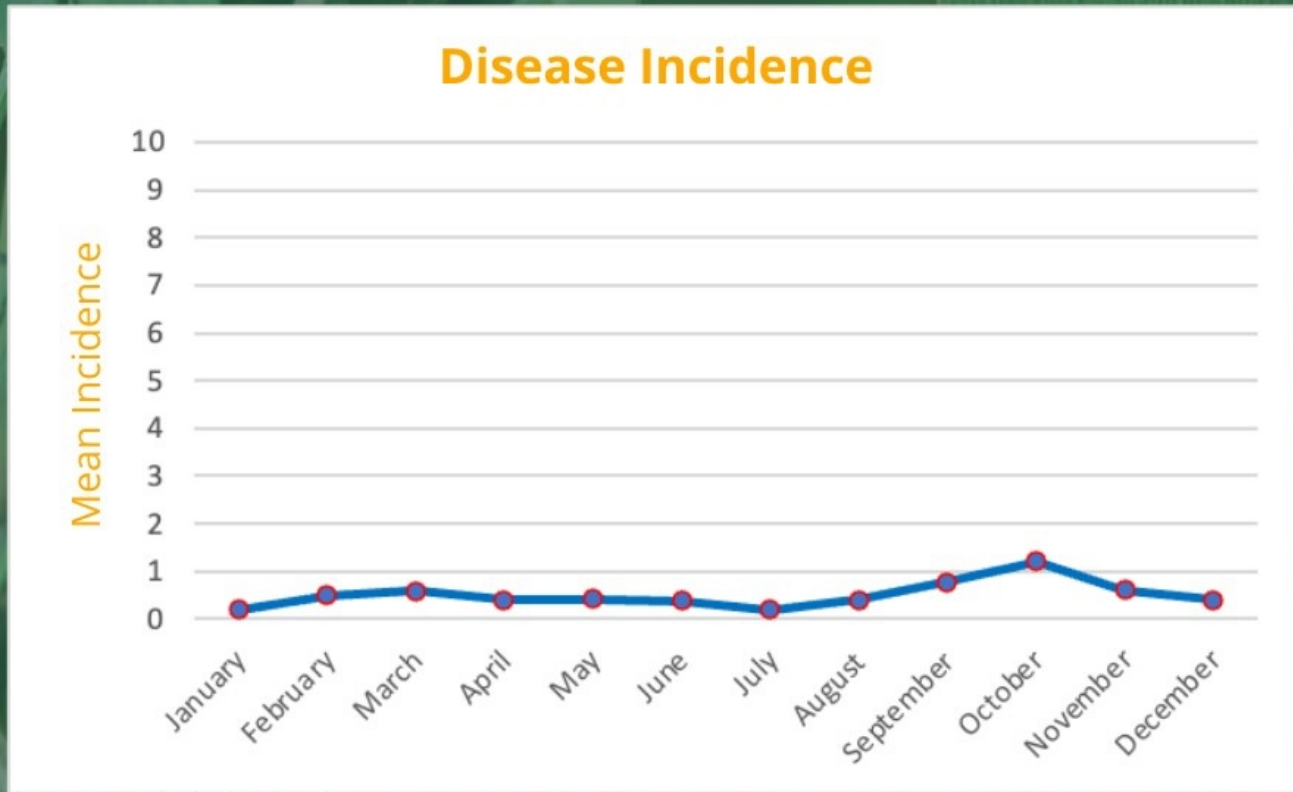


WHY IS IT IMPORTANT?

- Sheath blight is considered to be an important disease next to rice blast.
- It is an increasing concern for rice production, especially in intensified production systems.
- In Japan, the disease has caused a yield loss of as high as 20% and affected about 120,000–190,000 hectares.
- A yield loss of 25% was reported if the flag leaves are infected. In the United States, a yield loss of 50% was reported when susceptible cultivars were planted.
- Sheath blight has also caused a yield loss of 6% in tropical Asia.



National Trend of Sheath Blight from January to December 2023 on PRIME Monitoring Fields



Source : PRIME Data Base



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YEAR: 2023

PEST: SHEATH BLIGHT OF RICE

Region	Province	Sum of Area Affected
CAR	Kalinga	4.6
I	Pangasinan	0.5
II	Isabela	7.0
	Quirino	2.0
III	Pampanga	5.0
IV-A	Laguna	2.6
V	Sorsogon	0.1
VII	Cebu	0.3
	Negros Oriental	45.2
VIII	Leyte	6.4
IX	Zamboanga del Sur	1.0
XII	South Cotabato	0.5
	Grand Total	75.2

Source: DA-BPI-CPMD database

**based on submissions from DA-RFOs-Regional Crop Protection Centers*



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PREVENTION AND MANAGEMENT

- **Use a reasonable level of fertilizer adapted to the cropping season.**
- **Use reasoned density of crop establishment (direct seeding or transplanting).**
- **Carefully control of weeds.**
- **Drain rice fields relatively early in the cropping season to reduce sheath blight epidemics.**
- **Use FPA approved fungicide to treat seeds.**
- **Improve canopy architecture by reducing seeding rate or providing wider plant spacing.**

*There is currently no resistant rice variety available for cultivation.



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REFERENCES

**Bureau of Plant Industry-Crop Pest Management
Division**

Regional Crop Protection Centers

<https://www.apsnet.org/edcenter/disandpath/fungalsco/pdlessons/Pages/RiceSheath.aspx>

<http://www.knowledgebank.irri.org/training/factsheets/pest-management/diseases/item/sheath-blight>



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