

# RICE

# PEST

# RIVIA



## **Neck Blast**

**Causal Organism:** *Magnaporthe oryzae*

### **Affected plant parts:**

- Leaf
- Neck
- Collar
- Parts of panicle
- Node
- Leaf sheath

### **Effects to Affected plants:**

- Plants develop few or no grains at all.
- Affected seeds can be the source of inoculum (seed borne)

### **Factors Contributing to Disease Development:**

- Low soil moisture.
- Frequent and prolonged periods of rain shower.
- Cool temperature (daytime).
- Susceptible varieties
- High use of Nitrogen

**Upland rice** - large day-night temperature differences, resulting to dew deformation on leaves. Cooler temperatures favors its development.



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# How to identify?

- Node infection occurs in banded pattern.
- Lesions on the node are blackish to grayish brown.
- Infected nodes can cause the culm or the part of the plant that holds the panicle to break.
- Lesions on the neck are grayish brown and can cause girdling, making the neck and the panicle fall over.
- If infection of the neck occurs before milky stage, no grain is formed, but if infection occurs later, poor quality grains are formed.
- Neck and node blast can also cause whiteheads or white panicles, similar to stem borer infection.
- Whiteheads caused by stem borers can be pulled apart from the plant, the stem will separate at the point where the insect bored into it.
- With neck and node blast, tugging on the stem will not result in removal.



**Neck Blast**



**Infected Panicles**



**Node Blast**

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# PEST MANAGEMENT RECOMMENDATIONS

- Plant resistant varieties.
- Adjust planting time. Sow seeds early, when possible, after the onset of the rainy season.
- Split nitrogen fertilizer application in two or more treatments. Excessive use of fertilizer can increase blast intensity.
- Flood the field as often as possible.
- Application of silicon fertilizers aids silicon deficient soils in reducing blast.
- Systemic fungicides like triazoles and strobilurins can be used judiciously for control blast. A fungicide application at heading can be effective in controlling the disease in cases where the risk of yield losses is high.

**Source:** *IRRI*

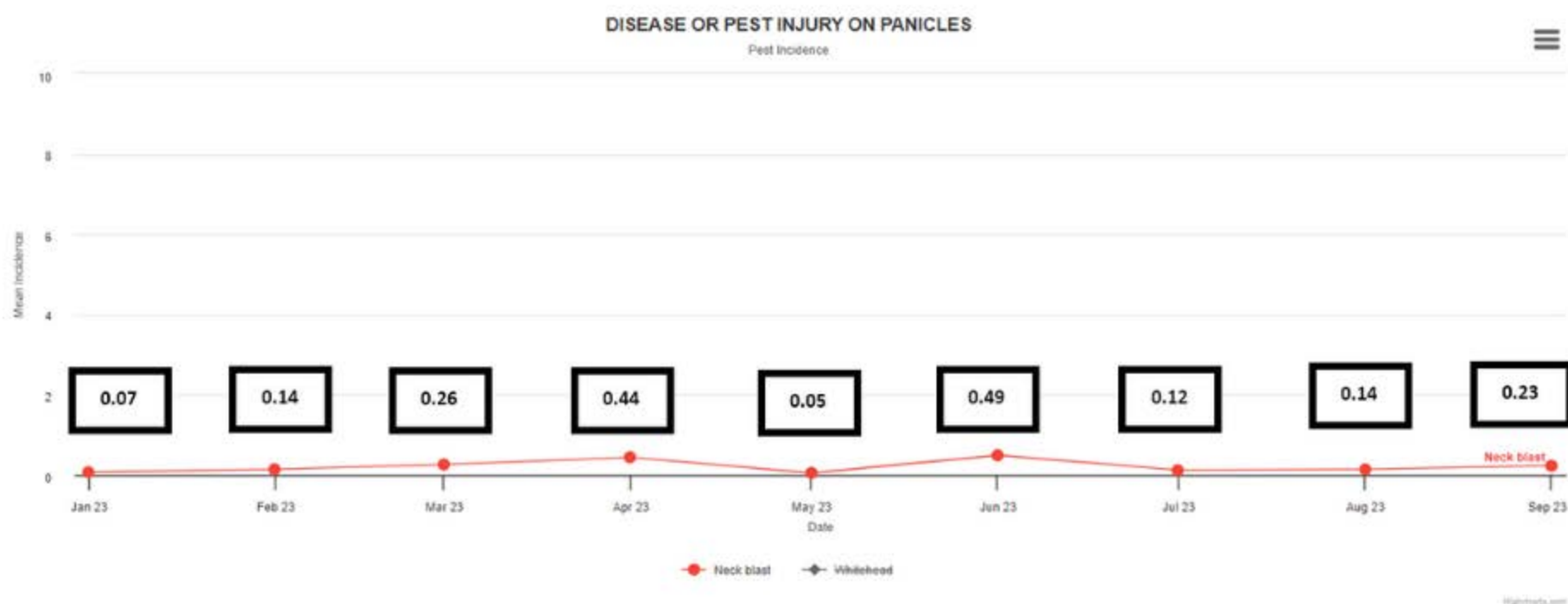


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# National Trend of the Average Incidence of Neck Blast from January to June 2023 on PRIME Monitoring fields



Source: [www.pestrisk.da.gov.ph](http://www.pestrisk.da.gov.ph)



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