

RICE

PEST

trivia!





Bacterial Leaf Streak

Causal Organism:

Xanthomonas oryzae pv. *oryzicola*

Growth Stages Affected:

Affect the plant during early stages, from the maximum tillering to panicle initiation.

How do you identify it based on its symptoms?



Knowledgebank.irri.org
Water-soaked lesions



Knowledgebank.irri.org
Linear lesions



Knowledgebank.irri.org
Enlarged lesions



Knowledgebank.irri.org
Yellow droplets of bacterial ooze

Source : Knowledgebank.irri.org

PhotoCredits: U.G. Duque & IRRI



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How to Confirm?

When the advancing part of the streaks are cut and placed in a glass/beaker with water, a mass of bacterial cells can usually be seen oozing out of the leaf, which makes the water turbid after five minutes.



Source : Knowledgebank.irri.org

PhotoCredits: BPI-CPMD & IRRI



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Why is it important?

- Based on reported cases, yield loss caused by bacterial leaf streak can range from 8–17% in the wet season, and 1–3 % in the dry season.



ugduque

Source : Knowledgebank.irri.org

PhotoCredits: U.G. Duque & IRRI

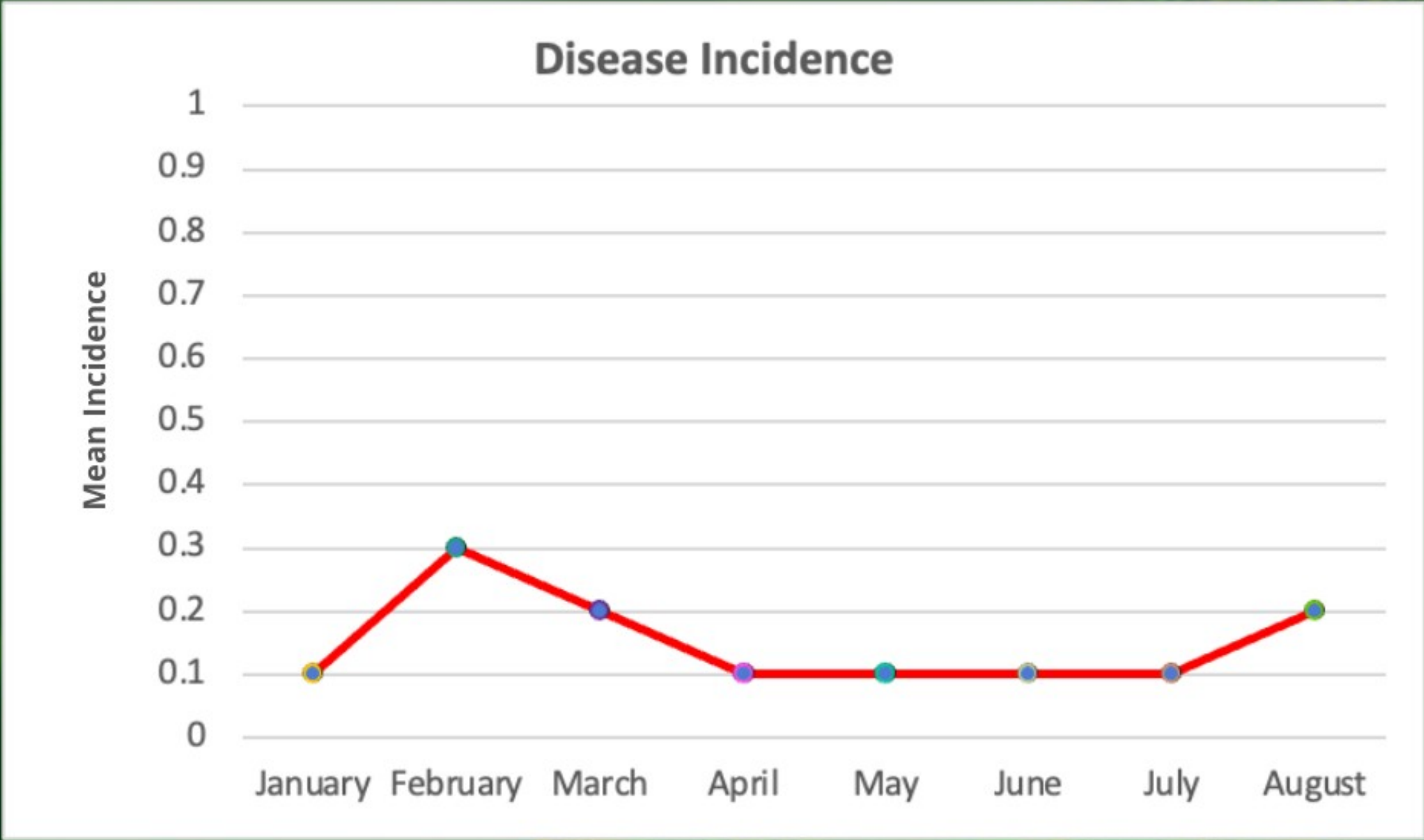


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National Trend of Bacterial Leaf Streak from January to August 2023 on PRIME Monitoring Fields



Source : PRIME Data Base

PhotoCredits: Knowledgebank.irri.org



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PREVENTION AND MANAGEMENT

- Plant resistant varieties.
- Remove weed hosts and plow under rice stubble, straw, rice ratoons, and volunteer seedlings, which may be infected by the bacteria.
- Use balanced amounts of plant nutrients, especially nitrogen.
- Ensure good drainage of fields (in conventionally flooded crops) and nurseries.
- Drain the field during severe flood.
- Dry the field during the fallow period to kill the bacteria in the soil and in plant residues.
- In cases of severe infection, when yield may be affected, a copper-based fungicide applied at heading can be effective in controlling the disease.

Source : *Knowledgebank.irri.org, PRIME Data Base*

PhotoCredits: *BPI-CPMD, IRRI, U.G. Duque, & R.E. Magbitang*



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