AgPractices&Domains

Hands on Activities- Group work 8 October 2021



Workshop on Modeling Management of Climatic Stress in Rice-based Cropping Systems: Application of the AgPractices&Domains Platform

7-8 October 2021 | SEARCA SOLVE Platform



The exercises

Objective: Exploring two topics of application of AgPractices&Domains

- 1. Access data for your site to formulate modelling led hypothesis for research purpose/planning
- 2. Evaluation of potential and risk associated to climate variability for site of study

Two Exercises

- 1. Using AgPractices&Domains for experimental planning for disease control management
- 2. Using AgPractices&Domains for yield gap analyses
- Five teams

USQ General questions and data to look for on the platform

- What is the current yield potential of your site of study?
- What is the current optimum sowing date?
- With the data provided, what is the yield gap in your site of study?
- What is the main risk associated to climate variability driving the yield variability in your site?
- How much yield gain may be expected with shifting sowing date in your site?
- What is the disease risk in your site?
- When is the season with high risk of biotic stress namely disease in your site?

Exercise 1-

How the data inform experimental planning for disease control management

Exercise 2 -

How the data inform the evaluation of survey data for yield gap analyses

USQ Exercise 1- Inform experimental planning for disease control management

 What is likely the main risk associated to climate variability driving yield variability in your site?

Climatic yield potential during the season under irrigated system

Drought index for the sowing date under rainfed system

Disease severity trends during the crop growth stage

• What is the disease risk in your site for your actual sowing date and your identified optimum sowing date?

Disease index comparison between your current and optimum sowing date

- When is likely the best sowing date for your disease resistance evaluation?
 Disease index and severity trends comparison between sowing date during the season
- When is likely the period to conduct close monitoring?

Data for Group 1 and 2

Two sites - one season wet season - different sowing dates

Data samples for Disease monitorig experiment planning Group1.xlsx

Exercise 2 – Inform yield gap evaluation with survey data

- What is the current yield potential of your site of study?
- Observed yield comparison with the potential yield
- With the performance data provided, what is the yield gap in your site of study? Observed yield comparison with the potential yield
- What is the optimum sowing date for your site?

Climatic potential yield among sowing dates under irrigated system

- What is the disease risk in your site for your current and identified optimum sowing date? Disease index comparison between your current and optimum sowing date
- What is likely risk associated to climate variability limiting yield gap reduction in your site?
- How much yield gain may be expected with shifting sowing date in your site?

Data for group 3 to 4

One site – two seasons- different sowing dates

..\Data YGAnalyses Group3 4.xlsx

Exercise 2 – Inform yield gap evaluation with survey data

- What is the current yield potential of your site of study?
- Observed yield comparison with the potential yield
- With the performance data provided, what is the yield gap in your site of study? Observed yield comparison with the potential yield
- What is the optimum sowing date for your site?

Climatic potential yield among sowing dates under irrigated system

- What is the disease risk in your site for your current and identified optimum sowing date? Disease index comparison between your current and optimum sowing date
- What is likely risk associated to climate variability limiting yield gap reduction in your site?
- How much yield gain may be expected with shifting sowing date in your site?

Data for group 5

Two sites – one season- different sowing dates

Data YGAnalyses Group5.xlsx