

<u>Chiang Mai</u> Journal of Science Faculty of Science, Chiang Mai University

Dear Author

Date: 22th April 2020

Evaluation Report

Manuscript Number: CMJS.12.11.19-10526

Title: "Evaluation of Genetic Diversity of Rice Blast Fungus (*Magnaporthe oryzae* Barr) Isolates Collected from South Central Coast Areas of Viet Nam"

Thank you for submitting your paper to Chiang Mai Journal of Science. I have now received the reports from the referees who have provided the comments included at the bottom of this letter. Based on their comments, I am pleased to inform you that your manuscript will be accepted as **"Research Article"** subject to the suggested <u>major revisions</u> according to the referees' comments. I recommended that you read them carefully and revise your manuscript accordingly. In your revised manuscript, please highlight the revisions and submit a list of the changes that have been made.

Please return the revised version of your manuscript to me within 1 month, preferably by **May 22, 2020** otherwise it will be treated as a new submission. If you need more time than this, please contact me to agree on an alternative deadline. On the other hand, if you decide not to submit a revised version of your manuscript, you must withdraw this submission before sending it to another journal.

Yours sincerely,

Warn Pathon-ane

(Asst. Prof. Dr. Wasu Pathom-aree)

Editor-in-Chief



REFEREE'S COMMENTS

REVIEWER#1

The introduction is too general. The manuscript is about fungal diversity which of course linked to rice genetics. The authors do not mention any genetic basis of rice growing in Viet Nam, for example, which variety has been grown or being grown and their genetic background. With this info, the authors can put together with the obtained pathotyping results and discuss the reason which and why resistance gene(s) active in the country or region.

As commented in the manuscript in the Materials and Methods, I afraid the authors might take the wrong decision on evaluation of susceptible and resistance scale. Please look at the comment.

The results are fine.

As the authors used differential set of R genes and obtained quite fruitful results; 26 rice lines from 4 regions with natural infection. I expected to see the discussion more about fungal diversity as mentioned in the title.

REVIEWER#2

Generally, the authors should provide the following information

- 1. Provide in details the method of in-field *M.oryzae* inoculation in rice varieties
- 2. Provide the ref of resistant genes in rice varieties based on the previous studies? Or the authors screen resistance gene in rice varieties using PCR
- 3. The author collected many *M.oryzae* isolates using single spore technique for evaluating genetic diversity using RAPD markers. Before doing that, the authors should provide the evidence that all fungal isolates were the rice blast fungus (the results of PCR or conidial morphology)
- 4. I do not see nay evidence regarding the avirulence of *M.oryzae* isolates used for inoculation in rice varieties that we can evaluate and discuss based on gene for gene interaction. The authors should provide any evidence or explain about this
- 5. In the result, the authors found that genetic diversity of *M.oryzae* population depends on the host genetic diversity and ecological regions. Are there any evidence to support this issue in the papers or any consistency with the previous studies? Please provide