

Rice yellow mottle virus (RYMV) resistance-breaking risk map for Africa

Project Title: P1670 - AfricaRice contribution to flagship project 4

Description of the innovation: Resistance – breaking risk map for Africa generated to guide the deployment of new resistant RYMV rice varieties.

New Innovation: No

Stage of innovation: Stage 3: available/ ready for uptake (AV)

Innovation type: Research and Communication Methodologies and Tools

Geographic Scope: Regional

Number of individual improved lines/varieties: <Not Applicable>

Region:

- Sub-Saharan Africa

Description of Stage reached: Virulence mutations that are present in a small proportion of the virus population can be sufficient for resistance breakdown. RYMV strains can overcome the RYMV resistance genes and alleles. We established a resistance-breaking risk map to optimize strategies for the deployment of sustainable and resistant rice lines in Africa.

Name of lead organization/entity to take innovation to this stage: AfricaRice - Africa Rice Center

Names of top five contributing organizations/entities to this stage:

- IRD - Institut de Recherche pour le Développement
- NARS - National Agricultural Research System, Cameroon

Milestones: No milestones associated

Sub-IDs:

Contributing Centers/PPA partners:

Evidence link:

- <https://www.ncbi.nlm.nih.gov/pubmed/28990483>

Deliverables associated: <Not Defined>

Contributing CRPs/Platforms:

- Rice - Rice