

カンボジアのイネいもち病菌レースは地域によってその出現頻度が異なる

Pathogenicity of Rice Blast Isolates from Cambodia and the geographical distributions

カンボジアのイネいもち病菌菌系は判別品種への反応から3つグループI, IIa, IIbに分けられ、グループの出現頻度は、メコン川流域とトンレサップ湖周辺、さらにアンコールワットで知られるシェムリアップ県と他の地域では異なっている。

グループIIaは、判別品種群に最も広い病原性を示し、広くカンボジア国内に分布し、特にメコン川流域に高頻度で現れる。

グループIIはシェムリアップ県に特に多く、他のトンレサップ湖周辺の地域ではIIbの頻度が高い。カンボジアにおけるいもち病菌菌系は地域によって異なる病原性をもったものが分布しているが、IIaをもとにIおよびIIbが分化したものと考えられる。

Blast isolates collected from Cambodia revealed wide variation, and classified into 3 groups, I, IIa, and IIb, using data from these reaction patterns of differential varieties.

The distributions of the blast races differed between the 2 regions, although blast isolates of group IIa were distributed commonly in both regions and groups I and IIb occurred at higher frequencies in the Tonle Sap region rather than the Mekong region.

The blast isolates in groups I and IIb were also less diverse than those in group IIa. Accordingly, Group II blast isolates overall were distributed in both regions with high diversity, but some modified blast isolates were additionally distributed in the Tonle Sap region.

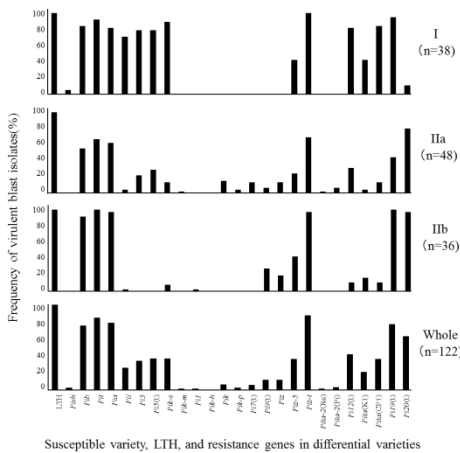


Fig. 1 Frequency of virulent blast isolates from Cambodia against differential varieties

Blast isolates from Cambodia were classified into three groups, I, IIa, and IIb, by a cluster analysis based on the data of reaction patterns to differential varieties harboring 23 resistance genes and of 1 susceptible cultivar, Lijiangxintuanheigu (LTH)

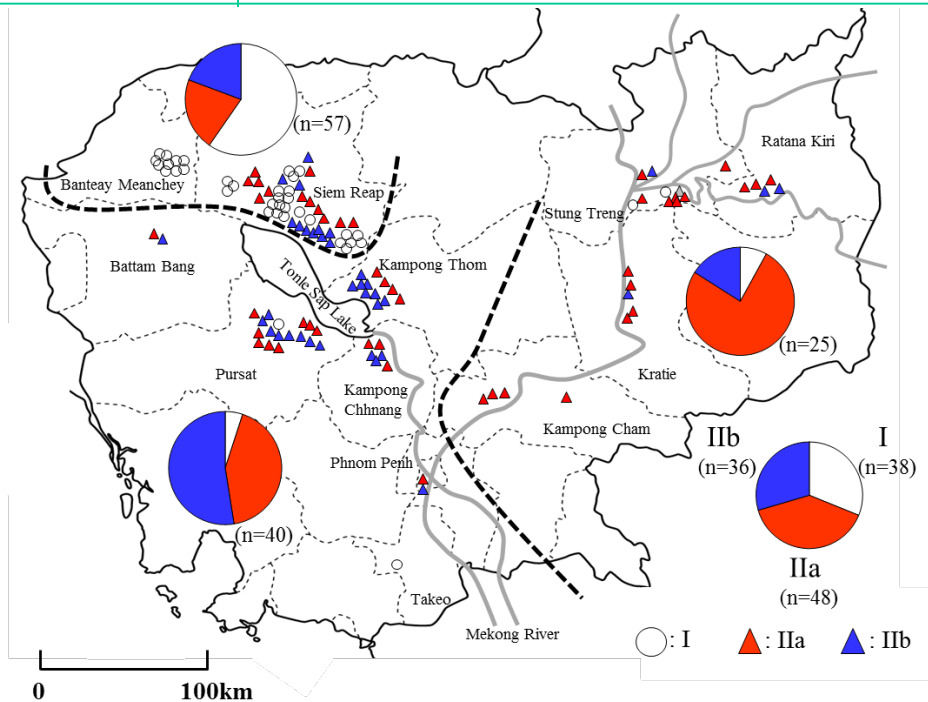


Fig. 2. Distribution of blast isolates classified into three groups; I, IIa and IIb, in Cambodia
Blast isolates of groups I was distributed with high frequency in Siem Reap, whereas group IIa was found at high frequency, and groups I and IIb at low frequency, in the Mekong river region. High diversity group IIa might be the basic population of blast races in Cambodia, and groups I and IIb were modified from IIa.

