yielding lines, and they had contrast adaptability to a different environment. Both varieties had wide spectrum of blast resistance and showed acceptable cooked rice texture. It is expected that the farmers will rapidly adopt these two varieties in high-altitude upland areas of Indonesia.

IV. Conclusion

The interaction between genotype and environment significantly affected rice agronomic performance in high altitude upland areas. The rice genotypes varied in their adaptability in different environments. Genotypes such as B14168E-MR-10 adapted well in locations with low environmental indexes, while genotypes such as B11592F-MR-23-2-2 adapted well in high environmental indexes. The upland rice genotypes had a broad spectrum of resistance to rice blast disease. Most of the genotypes had intermediate amylose content in the grains. Improved rice varieties identified through this study have the potential to be adopted by farmers in high altitude areas to increase rice productivity.

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