Poster Session | Field Crop Production | P1: Poster Session

[P1] Field Crop Production

2021年9月9日(木) 12:15 ～ 14:00 Room 1 (Poster) (Field Crop Production)

12:15 ～ 13:00

[P1-13]Variation in Grain Characteristics of Upland Rice Cultivated in Southeast Sulawesi, Indonesia

*Nominated for Presentation Awards

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Farms in Southeast Sulawesi Province, Indonesia, historically grow upland rice crops that utilize the slash-and-burn farming system. However, little is known about grain quality and the differences between upland rice varieties in this region. Ten traditional upland rice varieties were collected from the fields, and one upland variety was collected at a market in Kendari located within the province. Grain appearance was investigated. Amylose and protein content in brown rice were determined. These traditional varieties were highly varied in terms of grain appearance and grain quality-related factors. Grain color was white in six varieties, brown in four varieties, and blackish in one variety. The 1000-grain weight ranged from 20.7 to 33.5 g between the 11 rice varieties. The protein content in the 11 varieties ranged from 7.8% to 10.7%, with average of 8.7 %. Two rice varieties were characterized as glutinous with 0% amylose content. Amylose content in the eight varieties ranged from 14.8% to 19.7%, and they were characterized as non-glutinous. Additionally, we found one non-glutinous variety with extremely low amylose content (5.6%), which is a unique characteristic. These results indicate that this region contains valuable upland rice varieties, and this information is useful for future genetic resource studies.