

**B-109: Evaluation of grain quality characteristics of some commonly grown rice varieties (*Oryza sativa* L) in Matara district**

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Evaluation of rice varieties for grain quality characteristics is of importance to promote promising varieties among farmers. Six rice varieties, AT353, BG300, LD356, BW267/3, BG94/1, and BG379/2 grown in different agro-ecological regions in *Matara* district were collected in bulk samples and tested for quality characteristics such as milling, physical, physico-chemical, and cooking quality characteristics and proximate composition.

AT353 and LD356 are red rice varieties while others are milky rice varieties. Consumer preference, especially among southern Sri Lankans, is for red rice varieties. Proximate composition reveals that red rice varieties contained higher protein and lower fibre percentages. Milling and head rice recoveries are important criteria in determining high quality rice varieties. The varieties BG94/1, AT353, and BG379/2 showed higher milling percentages, higher head rice percentages, and higher protein contents. However, these three rice varieties recorded lower fibre contents compared to other varieties, BG300, in comparison, was inferior showing low milling percentage and low head rice percentage. Other varieties can be rated as average quality varieties.

It can be concluded from the study that the promotion of rice varieties such as BG94/1, AT353, and BG379/2 will be beneficial both to the farmer and

consumer. This will generate more income to the farmer, and on the other hand the consumer will benefit from increased quality standards.