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Varietal Differences of Oryzanol Content from Grains of the Korean Rice Landraces

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This study was conducted to investigate varietal differences of the oryzanol content from grains of the Korean rice landraces. Analytical reverse-phase HPLC method was used for analysis oryzanol content and separation individual components in rice grains. The oryzanol was made up of entire 10 components and among them the major components were Cycloartenyl ferulate, 24-Methylene cycloartenyl ferulate and Campesteryl ferulate. The total oryzanol contents of 305 rice germplasms showed distribution of 4.15~31.21 mg/100g broadly. Especially, oryzanol content of Choseon(31.21 mg/100g) showed 4 times higher than Chucheongbyeon (7.26 mg/100g).

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Quantitative Analysis of Allantoin in Various Rice Varieties by HPLC

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Identification and quantification of allantoin in rice grain of selected varieties were investigated. Allantoin was isolated from Jeokjinjubyon, and its structure has been elucidated on the basis of spectral data. Allantoin was extracted with a 70% acetone and analyzed by HPLC without any previous chemical derivatization. The concentration of allantoin in selected rice varieties was in a narrow range between 2 and 18 mg per 100 g of brown rice, and the lowest was 2.59 mg in Yeomyung.

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