

〈シンポジウム〉

γオリザノールの性質と製法について

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Characteristics and Productive Method of γ -Oryzanol

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Abstract

γ -oryzanol was discovered in 1953 by T. Tsuchiya and R. Kaneko from a crude rice bran oil. γ -oryzanol crystals are colorless and odorless; it has absorption maxima at 230 nm, 290 nm and 315 nm in n-heptane. The main constituent is a mixture of ferulates of triterpenoid alcohols and sterols.

The crude γ -oryzanol is separated from alkaline dregs produced during a refining process of crude rice bran oil and crude rice germ oil in alkaline low molecular alcohols. The crystal powder of oryzanol near mp 172°C is produced by recrystallization of the crude oryzanol in organic solvents.

A common use of γ -oryzanol in internal medicine is for autonomic nervous syndrome. γ -oryzanol also enhances micro-circulation of the human skin. Therefore, γ -oryzanol is used as an external medicine of skin, a preventive agent for the drying of skin and an antioxidant in toilet goods. In addition a suspension of γ -oryzanol with glycol and fatty acids in liquid is produced for toilet goods with a pearl gloss.