MeOH and H_2O (30: 70 then 100 : 0), detection : UV 220nm.Content of 1 in Adenophorae Radix was 0.006 ± 0.003% (n = 43). In addition, total ash content was 6.5 ± 4.0%, and loss on drying was 12.1 ± 2.1%.

[PD4-28] [2003-10-10 14:00 - 17:30 / Grand Ballroom Pre-function]

Quantitative Analysis of Puerarin and Daidzein in Domestic and Imported Puerariae Radix by High Performance Liquid Chromatography

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This study was carried out to investigate the quality control of domestic and imported Puerariae Radix. It was analyzed by HPLC using μ-Bondapak C_{18} column with 35% MeOH containing 1% CH_3CO_2H system as the mobile phase at UV 254nm. Good linearity showed over the range of 10 to 200μg/mℓ(r^2=1) for Puerarin, and 0.5 to 10μg/mℓ(r^2=0.9999) for Daidzein. The average contents of Puerarin and Daidzein were 5.5±1.2%(Domestic), 5.3±0.7%(Imported), and 0.05±0.02%(Domestic), 0.08±0.02%(Imported).The average recovery rates of Puerarin and Daidzein were 101.8±1.9% and 97.2±0.7%, respectively.

[PD4-29] [2003-10-10 14:00 - 17:30 / Grand Ballroom Pre-function]

Studies on the quality control of Araliae continentalis Radix

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The Araliae continentalis Radix is the root of Aralia continentalis Kitagawa, which belongs to the Araliaceae and is distributed in Korea, Japan, Manchuria, China and Sahalane. It is generally used as a folk medicine for its excellent medical action and efficacy in various symptoms such as headache, edema, inflammation, rheumatism and neuralgia. (-)-Pimara-8(14)-15-dien-19-oic acid (1) and 1-kaur-16-en-19-oic acid have been reported as the major constituent of A. continentalis Radix. Essential oils such as limonene, sabinene, myrcene, humulene and sesamin, β-sitosterol are also reported as constituent elements. However, the marker standard for quality control has not been reported yet. It is necessary to select the marker compound and establish the standard for the quality control. In this study, we selected (-)-pimara-8(14)-15-dien-19-oic acid (1) as an analytical marker compound. Quantitative analysis of (1) by GC after methylation showed 1.00±0.29% of (1) in 41 samples collected throughout Korea. Total ash content was 5.22±0.83% and loss on dring was 9.55±1.13%.

[PD4-30] [2003-10-10 14:00 - 17:30 / Grand Ballroom Pre-function]

Quality Control of Codonopsis Radix

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Codonopsis radix, a root of Codonopsis lanceolata (S. et Z.) Trautv., is a source of the traditional medicine and health foods. However quality control method is not established yet. This research is to establish the standard for the quality control of Codonopsis radix. From the root of this plant, 1,2,3,4-tetrahydro-β-carboline -3-carboxylic acid (1) was isolated. This alkaloid was adequate as a marker compound for quality control, since it is a unique constituent of Codonopsis radix. In particular, (1) was not found in Adenophorae radix, a common adulterants of Codonopsis radix. Furthermore, (1) has strong UV absorbance which makes it easy to detect in HPLC analysis. Analytical condition of (1) using HPLC was established as follows; column: RP-18 column, eluant: gradient elution of methanol and water, detection: UV 220nm. Content of (1) in dried Codinopsis radix was