Determination by the Reverse-Phase High Performance Liquid chromatography and Extraction of Resveratrol in Peanut(Arachis hypogaea L.) (C01-lee232807-Poster)

Authors:

- M.J.Lee* National Honam Agricultural Experiment Station, RDA
- Y.K.Cheong National Honam Agricultural Experiment Station, RDA
- K.H.Park National Honam Agricultural Experiment Station, RDA
- D.Y.Suh National Honam Agricultural Experiment Station, RDA

- J.H.Ryu Faculty of Biological Resources Science, Colleage of Agriculture, Chonbuk Natiional Uni.
- M.H.Lee National Honam Agricultural Experiment Station, RDA

Abstract:

Resveratrol contained in peanut was purified by C18 sep-pak cartridge. Analytical methods for measuring resveratrol in peanut were adapted to isolate, identify and quantify resveratrol in 11 cultivars of peanuts by HPLC with UV detector. Optimal conditions for the extraction was attained with ethanol-water(80:20 v/v) maintained at 45'C for 45min. After extraction, concentrate with rotary evaporator and quantified by reversed phase HPLC using a C18 column at 308nm. The 11 cultivar resveratrol content ranged from 0.018 to 1.125ug/g with an average of 0.289ug/g. Resveratrol content was higher in Daechongtangkong but lower Gipungtangkong. The trans-Resveratrol content was higher in 110, 130 days after sowing than other period. The resveratrol contents were higher in the seeds with than without testa, regardless of varieties and increased with water stress by without irrigation.

Corresponding Author Information: Mi Ja Lee National Honam Agricultural Experiment Station, RDA National Honam Agricultural Experiment

phone: 063-840-2257 fax: 063-840-2112 e-mail: esilvia@rda.go.kr Station, RDA Iksan, JJ 570-080 Jeonbuk

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