

Oil content and Fatty Acids Composition of 83 Groundnut (*Arachis hypogaea* L.) Genetic resources

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The groundnut (*Arachis hypogaea* L.), also known as peanut, is a high amount of good-quality vegetable oil in seeds cultivated worldwide. The aim of this study was to evaluate and analyze oil composition of 83 groundnut accessions collected from 7 countries include Korea and Philippines. Total oil contents were recovered by Soxhlet extraction and the fatty acid compositions were analyzed by using gas chromatography. Total oil contents of 83 groundnut accessions showed a significant variability among the entire domain of collections and ranged from 44.59 to 57.58 %. The averages of palmitic and stearic acid were 11.36 and 3.39 % ranged from 8.77 to 13.65 %, and 1.88 to 7.22 %, respectively. Oleic and linoleic acid showed a wide variation which ranged from 40.32 to 61.67 %, and 22.54 to 41.99 %, respectively. Arachidic acid was ranged from 0.93 to 2.42 %. Significant negative correlation was observed between oleic and linoleic acid.

[This study was supported by the Research Associate Fellowship Program (Project No. 01485901) of the National Institute of Agricultural Sciences, Rural Development Administration, Rep. of Korea]

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