

**Isolation and characterization of two water-soluble phytoconstituents from the leaf extract of  
*Cajanus cajan* (Pigeon pea)**

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**Abstract**

*The isolation and characterization of bioactive compounds from various medicinal plants cannot be over emphasized. The present study reports the isolation and characterization of two bioactives from the air-dried leaves of *Cajanus cajan* (Family: Fabaceae), a plant widely known for its biological potentials. Extraction and partitioning of the crude ethanol leaf extract of *Cajanus cajan* (Family: Fabaceae) yielded a butanol-soluble portion that was fractionated using series of flash and column chromatography into several fractions and sub-fractions. Further purification of the promising sub-fractions afforded the isolation of two compounds identified and characterized spectroscopically as 5-hydroxymethylfurfural (HMF) and 3-O-methyl-D-glucose for the first time from the leaves of *C. cajan*.*

**Keywords:** *Cajanus cajan*, leaf extract, butanol, 5- hydroxymethylfurfural, 3-O-methyl-D-glucose.

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