Production of Gallic Acid from Tannic Acid

Description:

Gallic acid is an organic acid found in a variety of foods and herbs that are well known as powerful antioxidants. Foods and herbs such as blueberries, walnuts, apples, flaxseeds, tea leaves, oak bark, watercress, flax seed and tea all contain Gallic acid. Gallic acid is also found in gall nuts, sumac, witch hazel, watercress, oak bark, and a variety of other plants and herbs. Gallic acid is also found as part of tannins, which are astringent, bitter plant polyphenols.

Its supplements are available as capsules, ointments and liquid extracts, and have been used traditionally to treat a variety of ailments. The form and dosage depend on the age of the patient and condition being treated. Gallic acid supplements are generally safe to use, although they may interfere with certain blood pressure medications. It is important to consult a doctor before using them to avoid possible adverse reaction and drug interaction.

Gallic acid can be bought as a supplement as well, specifically as capsules, liquid extracts, and even ointments. The supplement form of Gallic is not known to have any harmful side effects, though they can negatively interact with anti-hypertensive medications when taken in excess.

It is used in the pharmaceutical industry as a standard for determining the phenol content (a large group of several hundred chemical substances) of various analytes by the Folin-Ciocalteau assay.

Gallic acid, a product of tannin degradation, finds application in various fields including biological activities such as antibacterial, antiviral and analgesic. The work was undertaken to produce gallic acid from banana flower stalk and coir pith using fungal system isolated from soil of different places. Optimization of incubaton period for maximum fungal biomass was found to be 6 days and 9 days in banana flower stalk and coir pith amended broth respectively. Five fungal strains were chosen for Gallic acid production and the results reveal that banana flower stalk was found to be the better substrate than coir pith in producing gallic acid and fungal strains C 1 and I2 were found to be better producers than I3, T1 and T3. Therefore it is suggested that agricultural wastes containing tannin could be considered as alternative substrates for Gallic acid production.

For more details download PDF file.

Keywords: Gallic Acid Production, Production of Gallic Acid, Gallic Acid Production from Tannic Acid, Gallic Acid Uses, Gallic Acid Benefits, Gallic Acid, Gallic Acid Formation, Process for Preparation of Gallic Acid, Phenolic Acids (Gallic and Tannic Acids), Tannic and Gallic Acids, Gallic Acid from Tannic Acid, Tannic Acid, Preparation of Gallic Acid from Tannic Acid, Gallic Acid Production from Tannic Acid, Gallic Acid Industry, Production of Gallic Acid from Tannic Acid, Gallic Acid Manufacture, Galli

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