

BIOACTIVE COMPOUNDS OF TEA (CAMELLIA SINENSIS) FLOWERS

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ABSTRACT

Tea is an economically important non-alcoholic beverage-yielding plant for North East India and some parts of South India. Flower morphology is important to plant breeding as they provide important information on flower nature. Different bioactive compounds are present in Tea flowers which have multiple beneficial effects in tea drinkers. Genetically flowers are also different and major genes responsible for total catechin content in tea flowers such as chalcone synthase (CH2) and flavonol synthase (FLS) were found to be highly expressed during early flowering stage, while genes such as phenylalanine ammonia lyase (PAL1) and flavonoid 3'-hydroxylase (F3'H1) were expressed in the late flowering stage. Pserphids are main pollinators of tea. Though identification of morphological and genetically nature breeding becomes easy and higher success rate. The presence of health-beneficial bioactive molecules in tea flowers has been globally acknowledged.

KEYWORDS: Beverage, Bioactivity, Genetics, Tea Flowers