

**PARTICLE SIZE DISTRIBUTION OF HIGH GROWN BROKEN ORANGE PEKOE
(BOP) TEA**

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ABSTRACT

Tea grades are popularly described by various names according to their certain particle sizes. A knowledge of the particle size distribution of tea grades is important in testing them for conformity to specifications and in exercising control over manufacturing process.

Particle size distribution of high grown Broken Orange Pekoe (BOP) has been successfully analyzed by sieve analysis technique and it has been shown that the BOP grades have been completely characterized by the mean (\bar{z}) and standard deviation (s) of the particle size distribution based on a mathematical model (De Silva, 1972). This particle size has been found to be distributed in a vast range, (lognormally distributed). High grown BOP processing technique has been changed with the current market requirement by reducing the particle size. In applying the mathematical model as proposed by De Silva (1972) the relationship between the probits of cumulative undersize and the corresponding fineness moduli of the particle size have been established for high grown BOP. The mean fineness moduli and the standard deviation of the particles of BOP have thus resulted in the particle size reduction of high grown BOP.

Key Words: BOP, Particle Size Distribution, Sieve analysis, Fineness Moduli