

SEASONAL INFLUENCE ON THE DEVELOPMENT OF GOOD QUALITY IN TEA

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The term quality when used in its broadest sense describes all the characteristics of tea including appearance. In addition it is also used to refer specifically to the presence of certain desirable characteristics in the liquor. For instance low country teas are said to possess very little or no quality while high-grown teas have quality.

The potential to make good quality teas depend on the chemical composition of the tea flush. This in turn depends on the agroclimatic region where the tea is grown, the prevailing weather condition and the plucked unit of the flush. Thus all consideration of quality revolves around the quality potential of the starting material.

The term quality season is synonymous with the flavoury season. During the quality season the quality potential is at its highest level and in addition flavour too could be present in such teas. The development of high quality and flavour is conditioned by the weather prevailing during the season. Typically, during this period there is no rain, the days are clear and bright, nights are cold, it is windy and the atmosphere is very dry. It would seem that at least a fortnight of this type of weather is necessary for the appearance of chemicals responsible for flavour and the occurrence of rain causes the disappearance of these compounds. The rate of growth of the tea bush slows down considerably during this period.

The seasonal weather not only affects the field conditions and hence the chemical composition of the flush, but also affects the manufacturing conditions prevailing in the factory.

Withers are obtained much faster due to the low humidity of the atmosphere. Leaf temperature during processing remains somewhat lower as manufacture is carried out during the night. The rate of chemical reactions due to the lower processing temperature become slower.

The most important set of chemical reaction that take place during fermentation is the formation of Theaflavins and Thearubigins. The Theaflavins are the major compounds responsible for quality and brightness of liquor and infused leaf. Thearubigins contribute to the colour and strength of the liquor. The presence of certain other compounds, whose formation is favoured in agroclimatic regions such as the low country, or during conditions suitable for rapid growth, would retard the formation of Theaflavins and thus prevent the development of quality. Development of flavour is influenced by the presence of certain volatile aromatic compounds in the flush during the flavoury season.

Quality, colour and strength are all developed during fermentation. But beyond a certain period of fermentation the quality starts to decline. Colour continues to increase with time, but over-fermented teas will be dark and dull. Strength too follows the same pattern as colour and over-fermented teas become soft. Strength is also dependent on the type of rolling in addition to the period of fermentation.

In order to exploit the quality potential to the maximum the manufacturing techniques are altered to short withers, light rolling and short period of fermentation. Teas produced from flush of high quality potential using such modified techniques would have very high quality and possibly flavour but the liquors will be light and thin. If colour and strength of these teas are to be improved then it could be achieved only at the expense of quality.

The quality potential can vary from estate to estate even during the quality season. If manufacturing techniques designed to produce high quality teas are adopted with leaf of low quality potential, the resulting tea will be of only average quality with light and thin liquors. If the basic reasons for this failure to produce high quality is not fully understood, and the period of fermentation is further shortened in one's eagerness to produce good quality during the 'season' the resulting teas would have green liquors as well.

In the case of leaf with low quality potential it is advisable not to concentrate on quality but to attempt to produce teas with more colour and strength by such techniques as long withers, harder rolling and longer fermentation.

Judicial selection of manufacturing techniques is therefore called for in order to produce teas that are required by the market. This would also prevent the flooding of the market with one type of teas only, thereby depressing the prices for all.

THE NEEDS OF THE WORLD TEA MARKET

Mr H. Wijeratne

Gentlemen, first I would like to thank Dr Sivapalan and Dr R. L. de Silva for giving me this opportunity to address you gentlemen on the subject of "The needs of the world tea market".

The most consumed beverage in the world and possibly the least expensive is tea, and this will continue to be so for many years in the future. It is, therefore, very likely that, for this reason alone, new countries have emerged as tea producers resulting in the current world over-supply situation much to the dismay of long established and reputed quality producers such as ourselves. The international tea market as such is highly competitive but the consumer is endeavouring to demand and consume a tea that caters most to his or her palate preference. With the introduction of the tea bag the consumer does not see the actual tea itself and some of the packers and distributors of tea have over the years debased the quality of the tea that they are putting into the tea bag. It is my belief that it is for this reason that growth in world consumption did not keep pace with the increased production.

Pure Ceylon tea as it was well known and relished in the past has, in recent years lost its quality image and character in the perception of the consumer partly because