包種茶貯藏期間化學成分變化與品質關係之研究

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摘　要：台茶十二號包種茶在不同包裝材料及貯存在不同溫度環境下經半年後其化學成分中非揮發性成分之變化大致與前一年的實驗結果吻合。水分含量在透氣包裝的茶葉中，時間超過半年，水分含量均超過 5%，在品茶時發現有劣變產生。而在透氣透光的包裝材料且受陽光照射的茶葉中其所含的葉綠素、胺基酸會顯著減少，兒茶素的氧化量增加；而沒有受陽光照射的茶葉不論何種包裝材料及貯存溫度，非揮發性成分之變化不大。至於揮發性成分與貯存溫度有相當大的關係；茶葉的揮發性成分經分析以 dimethyl sulfide 含量最高約 6.05~7.08 ppm，茶葉貯存於-20℃者，其揮發性成分含量幾無變化；在 0℃及室溫貯藏溫度下 dimethyl sulfide、醋酸乙酯及 trans-2-hexanal 等含量會隨時間增加而減少，代之以醋酸、丙醛、1-戊烯-3-醇、n-capronaldehyde、4-甲基-2-戊胺等成分增加；除醋酸外其餘成分可能為茶葉品評時之陳味來源有關。由於包種茶香氣成分對品質的影響非常重要，以上結果盼可作為新茶與舊茶判別之依據。

The Effect of Variation in Organic Chemical Components on the Quality of Pauchung Tea During Storing.

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Abstract: Pauchung tea made of Taiwan Tea-12 (TTES-12) stored at -20, 0 and 25℃ for 10 months and in different environmental relative humilities were used as experimental materials. The changes of non-volatile compounds are agreed with the results of the same experiment of last year. The content of water is always above 5% when the teas are in the packing materials to let air through for 6 months. At the same time, the overall sensory of Pauchung teas were evaluated by well-trained panelist. The results show that the quality of teas get worse obviously. During storage in packing materials to let air through, the contents of chlorophyll and amino acids decreased while those of oxidative catechins increased as the storage in any materials and environmental relative humilities did not change significantly. The change of volatile compounds of tea is obviously effected on the temperature during storage. Total, 20~30 volatile compounds in these Pauchung teas were identified. Among them, dimethyl sulfide was found to be the most abundant one with amounts of 6.05~7.08 ppm. For these sample stored at 0 and 25℃, the contents of 3 components, e.g., dimethyl sulfide, ethylacetate, trans-2-hexanal decreased while those of 5 components, e.g., acetic acid, propionaldehyde, 1-pentene-3ol, n-capronaldehyde and 4-methy 1,2- heptylamine increased as the storage time increased. Except acetic acid, the other increasing components are probable to the sources of the aged flavor. According to above results, it may be to distinguish between fresh and aged teas.