ABSTRACT
In this study, using the Tai-tea No. 12, were used to made of green tea, pouchong tea, black tea and white tea, respectively. General physical or chemical analysis were determined for those teas freshly, and stored under different temperature and time. Including pH value, acidity, antioxidant capacity, color, catechins and total changes of plate number for teas. The experiment results showed that green teas, an unfermented tea, have higher total catechins and polyphenol content. Black teas, re-fermented tea, have the lowest catechins, total polyphenol content and pH value, and having the highest content of titratable acid and caffeine. The pouchong tea and white tea are partly fermented teas, most of their physicochemical analysis results are in the range between green tea and black tea. In the storage experiments, the pH value, titratable acidity, the DPPH antioxidant capacity of catechin content showed no significant change in trend at 4 °C after 48 hours. Tea stored at 25 °C, after 12 hours only, the pH value, titratable acidity, DPPH antioxidant capacity of catechins have significant changes in trends. Color analysis has indicated that the tea infusion will gradually turned in to red for both storaged at 4 °C and 25 °C. Investigating the safety of the tea infusion, stored at 4 °C, the experiment results showed that he total plate count has remained in safe level. Total plate counts after 12 hours stored at 25 °C, green tea, pouchong tea and white tea have all exceeded the safe level. The black tea can be kept up to 24 hours based on a total plate count test. Based on the above results, the tea quality and safety were subjected to be changed during storage for different temperature and storage time. Tea infusion should be kept at 4° C for good qualities and safety.
4.2.5 茶汤在儲藏期間的兒茶素及咖啡因之變化

4.2.6 茶汤在儲藏期間的總生菌數之變化

5. 結論

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