溫度對春、冬季茶樹生育及品質之影響

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摘　要：本試驗目的為了解溫度對茶樹生育之影響，確定基礎與應用價值，在栽培管理上加以調整，減少或避免對茶樹生育產生負面影響，進而有效促進茶芽生長。本年度試驗結果顯示，青心烏龍及台茶 12 號兩品種對溫度試驗反應略有不同，在氣溫試驗兩品種均以日/夜溫 33/27℃對茶芽萌發及生長速率最快，最早採摘，28/22℃其次。根溫試驗青心烏龍以 25℃萌芽最早，茶芽生長速率較快，茶芽生長長度平均 10.6 公分(剪枝後 35 天)，採摘期最早，20℃其次茶芽長度 8.5 公分，以 30℃萌發最遲，較 25℃遲 14 天以上；台茶 12 號除了 15℃萌芽最遲，約 7 天以上，30℃和 25℃茶芽生長長度分別平均 10.9和 10.7 公分(剪枝後 35 天)。田間試區測量土壤深度 20 公分的溫度，進行灌溉溫度變化較小，變化範圍 1-1.5℃，未進行溉溫度變化範圍 2-2.5℃，土壤溫度變化受氣溫變化影響很大，最高溫較氣溫最高晚間 2~3 小時。

Effect of Temperature on Spring and Winter Season Tea Growth, Develop and Tea Quality

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Abstract： The aim of this experiment was to understand the effect of temperature on tea tree growth, to make sure it's base and apply worth. Change the culture management to reduce or avoid negative effect on tea plant growth, so as to control tea growth efficiently. The results of this experiment review that the responses to temperature between the two varieties 'Chin-Shin Oolong' and 'TTES (Taiwan Tea Experiment Station) No.12' were a little different. In the air temperature tests, bud germination and growth rate of both varieties under day/night 33/27℃ condition was the fastest, and first to be yielded. The second was under 28/22℃ condition. In the root temperature tests, bud germination of 'Chin-Shin Oolong' at 25℃ was the first and also has the fastest growth rate, and the second is at 20℃. Bud germination under 30℃ condition was the latest, and was late than 25℃ condition more than 14 days. TTES No.12 had better response to 20 , 25 and 30℃ root temperature condition, but at 15℃ bud germination was late more than 7 days. The measurement of the temperature of soil 20 cm deep showed that the temperature had smaller change range under irrigation than without irrigation. The range of irrigation was between 1-1.5℃, and without irrigation the range was between 2-2.5℃. The highest temperature of soil was occurred late than air about 2-3 hours.