

有益微生物對茶苗生育之影響

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摘要：本試驗探討不同有益微生物對茶苗生育之影響。*Bacillus substilis*(BS)原液含菌數為 10^8 cfu/ml，*Streptomyces saraceticus*(SS) 原液含菌數為 10^8 cfu/ml，將菌液稀釋成四種濃度，並以噴水(CK)當為對照，定期噴施於青心烏龍及鐵觀音穴植管苗中，生長一年後調查其生育的情形。青心烏龍茶苗施用 BS 2000x、1000x、500x 及 200x 之成活率分別為 97.8%、90.6%、92.4%及 89.7%，施用相同濃度之 SS 茶苗成活率分別為 77.0%、77.0%、76.3%及 65.9%，對照組之成活率為 77.7%；噴 BS 各濃度茶苗之株高平均皆達 29cm 以上，葉數達 14 葉以上，穗鮮重達 5g 以上。根鮮重達 2.15g 以上，茶苗生長明顯的較對照組為佳；青心烏龍噴 SS 茶苗生育亦與 CK 生長差異不大，尤其噴 SS 2000x 對茶苗成活率反而有被抑制的現象。鐵觀音施用四種濃度之 BS 茶苗成活率在 10.7%至 5.4%之間與 CK 之 7%差異不顯著；施用 SS 各濃度之茶苗成活率在 43%至 26.9%，茶苗株高在 26.3 至 44.3cm，茶苗生育明顯較 CK 為佳。

The Effects of Bioagents on the Growth of Tea Cuttings in Dibbling Tubes.

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Abstract : Effects of Different biogents on the growth of tea cuttings in dibbling tubes were discussed in this studies. Four concentrations of *Bacillis subtilis* (BS) stock solution containing 10^8 cfu/ml, *Streptomyces saracetice* (SS) stock solution counting 10^8 cfu/ml and control were sprayed on cultivars Chin-shin Oolong and Ttee-kuan Yin once every ten days. Survival rate, length of shoots, number of leaves, weight of shoots and width of stem were recorded after 360 days cutting. In cv. Chin Shin Oolong, the survival rates of tea cuttings spraying with 2000, 1000, 500 and 200 dilution rates of BS stock solution and check were 97.8%, 90.6%, 92.4%, 89.7% and 77.7%, respectively. However the survival rates of tea cuttings spraying with 2000, 1000, 500 and 200 dilution rates of SS stock solution and check were 77.0%, 77.0%, 76.3%, 65.9 and 77.7%, respectively. Spraying BS solution had better effects on subsequent growth of tea cuttings than SS solution. Conversely, in cv. Ttee-Kuan Yin , SS solution had better effects on the growth of tea cuttings than BS solution.