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Abstract
Camptotheca acuminata dence. is one of the unique perennial tree, fruit resembling the lotus. It grows in mainland China Yangtze valley and south various provincial capital areas. Camptothecin, one of its major metabolite, has the ability to control the leukemia. It has been confirmed that camptothecin has obvious effect on intestines cancer treatment. Depending on the geography factor and the weather effect, the content of camptothecin in tree is unstable, therefore the objective of the present investigation is to establish an Camptotheca acuminata dance. callus.
Callus induction was obtained by culturing leaves and stem segments on MS basal medium supplemented with 1 mgL-1 BA and 3 mgL-1 2,4-D for 3 weeks. The callus were maintained and proliferated on MS basal medium supplemented with 1 mgL-1 BA, 1 mgL-1 NAA. Suspension cells were cultured on MS basal liquid medium supplemented with 1 mgL-1 BA, 1 mgL-1 NAA on a rotation shaker in the light condition. After 4 weeks culture, the dry weight of cells was about 3.95 g/L and CPT content achieved about 0.06(dry weight %).
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