High-frequency of Somatic Embryogenesis and Transference to Plantlets from *Carica papaya* L

*Zou Yunxia** *Guo Huishang*

Abstract *Carica papaya* L. ovules calli was induced upon MS (MurashigeSkoog 1962) medium containing 1mg/L IAA, 2mg/L, 2mg/L GA_3 ann 3% sucrose, and 1/2 MS medium containing 400mg/L glutainine, 20% filter-sterilizen concnut milk (CM) and 6% sucrose. The calli was subcultured on MS medium supplemented with 20% CM, 6% sucrose and 2mg/L 2.4-D. High-frequency embryonic calli and somatic embryogenesis accurred on modified MS medium containing 160mg/L Adeninsulfat Adenine Sulfate, 1mg/L NAA, 0.5mg/L KT, 1mg/L GA_3 and 4% sucrose. Normal plantlets were obtained. *Carica papaya* L. artificial seeds had been formed and already germinated. Plants have been successfully established in the soil.

Keywords ovule, embryonic calli, somatic embeyo, Carica papaya L.

·简　讯·

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由中山大学学报编辑部编辑的《中山大学学报论丛》1992年第2期(物理学论文集)将于近月出版发行。论文集收录了物理学系、无线电电子学系等单位的最新科研成果25篇。

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(张　文)

* Biotechnology Research Center

Selenium in the Ecological Environment of Hainan Island

*Liao Jinfeng**

Abstract Selenium is an important trace element which is essential to animals and human beings, but may be harmfur when its content in the ecological environment goes beyond the mormal level. The content of Se in the ecological environment is controlled by a series of factors such as soil, water and plant. The Se content in soils of Hainan ranges from 0.043 to 0.785ppm, which mostly depends on biotic climatic conditions. In the upper layer of soil, Se often adheres to and is fixed by humus, especially by fulvic acid. Se also adheres to clay mineral. The water soluble Se content in soils of Hainan ranges from 3.50 to 20.50ppb. $HSeO_3^-$ can combine with $Fe(OH)_3$, froming insoluble compound $Fe_2(OH)_4SeO_3$, and this leads to a lower soluble Se content. Selenium content in the water environment of Hainan ranges from 0.8 to 1.85 ppb. Se content in plants of Hainan ranges from 0.021 to 0.319ppm, which is related to plant properfies, water soluble Se content, and other factors.

Keywords selenium, Se content, Hainan Island

·简讯·

印件防伪标记隐色油墨

由广东省技术开发中心资助，我校高分子研究所何宜和梁兆熙及校外有关工程技术人员协助研制的隐色油墨已开始在社会生产和使用。这类隐色油墨的印件墨迹，在可见光下无色，在紫外线照射下呈绚丽荧光。可用于重要证件、有价证券、商标和包装的隐色标记，以资辨别和防范印件的涂改和假冒。这类油墨适合于非化工行业的印刷厂自行生产和使用，且转让不同厂家有不同型号，在一定程度上可以防范对印件隐色标记的仿印。经接受技术转让的印刷厂家生产和使用，在社会上反应良好。

（何 宜）

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