

日芽萌动时达到最高峰, Menzel 等^[9]发现叶片的 $w(\text{氮})$ 超过 1.85% 时就会引起荔枝长梢, 所以龙眼萌动时氮含量过高与 2 月份的花序发生“冲梢”有关。

参考文献:

[1] 吴颂如, 陈婉芬, 周 雯. 酶联免疫法(ELISA)测定内源植物激素[J]. 植物生理学通讯, 1988 (5): 53—57.

[2] 向曙光, 刘思俭, 朱万洲, 等. 应用苯酚测定植物组织中的碳水化合物[J]. 植物生理学通讯, 1984, 19(2): 42—44.

[3] 全月澳, 周厚基. 果树营养诊断法[M]. 北京: 农业出版社, 1982. 66—77.

[4] 吴定尧, 张海岚. 龙眼高产优质高效益栽培技术[J]. 广东农业科学, 1997, (5): 20—22.

[5] 吴定尧, 张海岚. 龙眼高产优质高效益栽培技术[J]. 广东农业科学, 1997, (6): 27—29.

[6] LUCKWILL L C. The control of growth and fruitfulness of apple tree[J]. LUCKWILL L C, CUTTING C V. Physiology of tree crops[C]. London: Academic Press, 1970. 237—257.

[7] BADR S A, HARTMANN H T, MARTIN G C. Endogenous gibberellins and inhibitors in relation to flower induction and inflorescence development in the olive[J]. Plant Physiology, 1970 46: 674—679.

[8] 王世平, 许明宪, 孙云蔚. 苹果顶芽中内源激素动态与成花关系研究[J]. 果树科学, 1989 6(3): 137—142.

[9] MENZEL C M, SIMPSON D R. Lychee nutrition: a review[J]. Scientia Horticulturae, 1987, 31: 195—244.

A Study on Flower Differentiation of ‘Shixia’ Longan (*Dimocarpus longana* Lour. cv. Shixia)

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Abstract: In Shenzhen, flower bud physiological differentiation of ‘SHIXIA’ longan occurs between mid December and January of the next year, its morphogenesis differentiation beginning in late January. The whole ‘shoot-like bud’ come into inflorescence development period in early February, and its flowerets differentiates in late February, the developmental plasticity of the ‘shoot-like bud’ and the independence of flower bud morphogenesis between apical meristem and the axillary meristems are supposed to be the anatomical reasons for inflorescence ‘flushing’. High levels of iPA and ABA, high $b(\text{iPA})/b(\text{GA}_{1/3})$ ratio of buds, high levels of total sugar content and high $b(\text{C})/b(\text{N})$ in leaves were related to flower induction. High ABA level, high $b(\text{iPA})/b(\text{GA}_{1/3})$ and $b(\text{C})/b(\text{N})$ were related to the formation of inflorescence.

Key words: *Dimocarpus longana* Lour.; shoot-like buds; morphogenesis; endogenous hormone; leaf nutrition

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简 讯

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