论文

镁营养状况对烟叶各类腺毛密度的影响

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摘要 通过水培试验研究烤烟品种K326在0、80、160、250 (CK) mg/LMg2+ 营养水平下,经过30d的苗期生长叶片各类腺毛密度的变化。结果表明: 苗期烟叶的上下表皮腺毛密度的差异不明显,下表皮的腺毛密度略大于上表皮,各类腺毛中以长柄腺毛居多。上表皮腺毛对缺镁的敏感性大于下表皮。在试验的Mg2+ 浓度范围内,烟叶各类腺毛密度随着Mg2+ 浓度增大而增多。当Mg2+≥160mg/g烟草经过30d生长腺毛密度随着浓度Mg2+ 增大而增多,而Mg2+ ≤80mg/g后各类腺毛密度随着Mg2+ 浓度降低而减少,这种变化在烟叶的上表皮表现的更为明显。

关键词 烤烟;密度; 腺毛; Mg

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Effect of Mg²⁺ Concentration on the Density of Glandular Trichome of Flue-cured Tobacco

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Abstract

Study on density changes of glandular trichomes on flue-cured tobacco leaves under varied Mg concentrations (0、80、160、CK (250) mg/L) was carried out by hydroponic culture with variety K326. After 30d of seedling growth, densities of different kinds of leaf glandular trichomes were investigated. The results indicated there were no obvious differences between trichome densities of upper epidermis and nether epidermis, trichome density on nether epidermis was slightly higher than the upper epidermis, the tall trichome was the major one among all kinds of trichomes. Trichome in upper epidermis was more sensitive to Mg deficiency than those on nether side. When Mg2+ \geq 160mg/g, with increase of Mg concentration, 30d seedling leaf trichome density increased; when Mg2+ \leq 80mg/g, with the decrease of Mg concentration, seedling leaf trichome density reduced. This change occurred more obvious in upper epidermis.

Key words Flue-cured tobacco; Density; Trichome; Magnesium

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