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# 不同氮源对烤烟漂浮育苗氮素利用及烟苗生长的影响

张 梦[1]， 梁永江[2]， 张长华[2]， 陈小明[2]， 杨宇虹[3]， 袁 玲[1*]

1 西南大学资源环境学院，重庆 400716； 2 贵州省遵义市烟草公司，遵义 563000；3 云南省烟草研究所，云南玉溪 653100

# Effects of nitrogen sources on nitrogen utilization and growth of flue-cured tobacco in the floating-seeding system

ZHANG Meng[1], LIANG Yong jiang[2], ZHANG Chang hua[2], CHEN Xiao ming[2], YANG Yu hong[3], YUAN Ling[1**]

1 College of Resources and Environment, Southwest University, Chongqing 400716, China; 2 Zunyi Tobacco Company, Zunyi,Guizhou 563000, China； 3 Tobacco Research Institute of Yunnan Province, Yuxi, Yunnan 653100, China

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**摘要** 采用水培漂浮育苗的方法，研究4种氮源（硝态氮、铵态氮、酰胺态氮、硝酸铵）对烤烟漂浮育苗系统中氮的利用状况。结果表明，在烤烟漂浮育苗系统中，氮的表观利用率由高到低依次为：硝态氮源＞酰胺态氮源＞硝酸铵＞铵态氮源；氮的实际利用率表现为前三种氮源之间无显著差异，但它们均显著高于铵态氮；烟苗根系活力、光合色素含量、木质化程度等壮苗指标是以硝酸铵、酰胺态氮为氮源的效果显著高于单纯的硝态氮。尿素添加少量的硝态氮是烤烟漂浮育苗培养壮苗最佳的氮源选择。

**关键词：** 烤烟 漂浮育苗 氮形态 氮素利用率

Abstract： The utilization of four different forms of nitrogen, NO3--N, NH4+-N, (NH2)2CO-N and NH4NO3, in the flue-cured tobacco floating-seeding system was studied. The results indicate that the highest N apparent utilization efficiency is in the NO3--N flue-cured tobacco floating-seeding system, and is followed by the (NH2)2CO-N, NH4NO3 and NH4+-N systems. The N actual utilization efficiency is in the order: NH4NO3≈(NH2)2CO-N≈NO3--N＞NH4+-N. Tobacco seedling indices, such as root activity, photosynthetic pigment content and degree of lignification in the NH4NO3 or (NH2)2CO-N systems are significantly higher than those in the NO3--N systems. Therefore, urea plus a small quantity of NO3--N could be an optimum selection of N source to improve the qualities of tobacco seedlings and economic fertilization in the floating-seedling system.

Keywords： flue-cured tobacco floating-seeding system nitrogen forms nitrogen utilization efficiency

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Corresponding Authors: 张梦 Email: zoerobinman@163.com

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