

The Effects of Mycorrhizae on the Growth of *Pinus massoniana* and the Medium in Containers

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Abstract It was very significant for the effects of culturing seedlings of *Pinus massoniana* Lamb associated with mycorrhizae in containers. The growth of the seedlings was greatly increased. The height, diameter and dry weight of the seedlings with mycorrhizae raised by 109.7%, 66.4% and 411.2% respectively as compared with those without mycorrhizae. The physical and chemical characteristics of the medium in containers were improved, in which the medium became loosened, kept much water, contained more nutrients such as organic matters, N, P, and K, and increased the total quantity of microorganisms and the proportion of fungi to *Actinomyces*, and lowered the ratio of R/S.

Key words *Pinus massoniana* Lamb, containered seedling, mycorrhiza, medium.

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“余甘子加工利用技术”研究成果通过鉴定

“余甘子加工利用技术研究”系 1989 年林业部课题,由中国林业科学研究院资源昆虫研究所承担。经过 5 a 研究,于 1994 年 12 月 10 日由林业部科技司主持在昆明通过技术鉴定。鉴定委员会一致认为,该项成果达到国际先进水平。

课题组对余甘子的加工利用技术、系列产品的开发及下脚料的综合利用均作了系统研究。特别是解决了余甘子出汁率低、果肉果核分离的技术难题,研制出了脱核机,提高果汁出率 15% 左右。同时,运用经研究所得的先进加工技术于余甘产品加工,最大限度地保存了余甘子的有效成份,提高了余甘子产品的保健效果。率先弄清了余甘子有效成份的防癌、抗衰老、增强人体免疫力的功能。并在阶段性成果的基础上,与有关部门和厂家合作,先后建立了余甘原汁生产线 4 条,总加工能力 2 000 t,取得较好的经济效益和社会效益。

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