

园艺—研究报告

具备释放负离子功能室内植物的种质资源研究

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摘要:

通过对植物释放负离子的研究, 筛选出可产生较高浓度负离子的室内植物, 以保持和提高室内环境的负离子浓度, 改善室内空气质量。在密封的玻璃室(80 cm × 80 cm × 80 cm)内对天南星科、百合科等25个科中的36种植物释放的负离子浓度进行测量, 结果表明: 桑科的琴叶榕(*Ficus lyrata*)产生的负离子浓度最大达76 ions/cm³, 景天科的玉树(*Crassula portulacea*)最低为26 ions/cm³。以全天的均值来看, 蓬莱松

(*Asparagus myrioeladus*)和四季秋海棠(*Begonia semperflorens*)的负离子浓度为43 ions/cm³最高, 是对照试验的2.4倍。大部分植物在自然状态下产生的负离子浓度都表现出白天时段高于夜晚时段。植物在不同时段产生的负离子浓度值除个别植物变化幅度较大外, 大部分植物在全天的浓度值都较为平稳。

关键词: 室内环境

Study on Indoor Plant Germplasm Resources which Generate Negative Air Ions

Abstract:

Generation of negative air ions (NAI) by indoor plants which belong to 25 families (Araceae, Liliaceae, etc.) was studied. Those plants which can produce high concentration of NAI to maintain, even to increase the amount of NAI indoor was screened out. And they were capable of improving the quality of indoor environment. Measurements of NAI concentration generated by 36 species of plants were taken inside an airtight glass container. The results showed facts as following: *Ficus lyrata* produced 76 ions/cm³ which was the highest while *Crassula portulacea* produced 26 ions/cm³, the lowest. By mean of concentration in a whole day, *Asparagus myrioeladus* and *Begonia semperflorens* respectively produced a highest level of 43 ions/cm³, which was also 2.4 times as controlled experiment. In the state of nature, most plants produced higher NAI concentration during daytime than during night. And the concentrations of NAI generated by most plants kept steady at different times of day while a few plants kept larger rate of change in the concentrations of NAI.

Keywords: indoor environment

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