



中文标题 检索 药刊检索

施氮水平对广金钱草产量和活性成分含量的影响

投稿时间: 2010-01-27 责任编辑: 吕冬梅 [点此下载全文](#)

引用本文: 周佳民,尹小红,陈超群,黄敏,彭福元,朱校奇.施氮水平对广金钱草产量和活性成分含量的影响[J].中国中药杂志,2010,35(12):1533.

DOI: 10.4268/cjcm20101206

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基金项目: 广西大学科研项目(x061106);湖南省农业科学院科技创新项目(2009hmkcx16)

中文摘要:目的: 确定广金钱草的合理施氮水平。方法: 在大田栽培条件下,采用随机区组设计,研究了5个施氮水平(150,187.5,225.0,262.5,300.0 kg·hm⁻²)对广金钱草产量和活性成分含量的影响。结果: 施氮可明显提高广金钱草产量及多糖、总黄酮和总皂苷含量,但提高的幅度并不总随施氮水平的上升而明显上升。其中,225.0,262.5,300.0 kg·hm⁻²施氮水平下产量的差异不显著;225.0,262.5,300.0 kg·hm⁻²施氮水平下多糖含量的差异不显著;300.0 kg·hm⁻²施氮水平下的总黄酮含量显著低于150.0 kg·hm⁻²施氮水平(P<0.01);262.5,300.0 kg·hm⁻²施氮水平下的总皂苷含量差异并未达显著水平。结论: 225.0~262.5 kg·hm⁻²为广金钱草的适宜施氮水平。

中文关键词: 广金钱草 氮素 产量 多糖 总黄酮 总皂苷

Effects of nitrogen application levels on yield and active composition content of *Desmodium styracifolium*

Abstract: Objective: To find out the optimal nitrogen application level of *Desmodium styracifolium*. Method: A field experiment using randomized block design was carried out to study the effects of 5 nitrogen application levels (150, 187.5, 225.0, 262.5 and 300.0 kg·hm⁻²) on yield and active component content of *D. styracifolium*. Result: Nitrogen application could increase the yield and contents of polysaccharide, total flavonoides and total saponins of *D. styracifolium*. However, the enhancing extent of the active component content and the yield were not always significant with the increase of nitrogen level. In which, the yield were not significantly different among the nitrogen application levels of 225.0, 262.5, 300.0 kg·hm⁻²; the polysaccharide content was no significantly difference among the nitrogen application levels of 225.0, 262.5 and 300.0 kg·hm⁻²; the total flavonoides content under the nitrogen level of 300.0 kg·hm⁻² was significantly lower than that of 150.0 kg·hm⁻² (P<0.01), and the total saponins content under the nitrogen level of 300.0 kg·hm⁻² was no significant difference compared with that of 262.5 kg·hm⁻². Conclusion: The optimal nitrogen application level of *D. styracifolium* was 225.0-262.5 kg·hm⁻².

keywords: *Desmodium styracifolium* nitrogen yield polysaccharide total flavonoides total saponins

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