

金佛山地区不同生境下土壤有机质与全氮含量及其相关性

陈伟, 杨国锋, 赵云, 张苗苗, 孙娟, 张德罡

摘要:

通过对金佛山地区不同生境下土壤有机质和全氮含量的测定表明, 0~10 cm土层内, 有机质含量的顺序为西坡(108.088 g/kg) > 南坡(92.229 g/kg) > 山顶(89.727 g/kg) > 北坡(80.881 g/kg), 全氮含量的顺序为山顶(6.482 g/kg) > 南坡(92.229 g/kg) > 西坡(4.355 g/kg) > 北坡(3.928 g/kg), 土壤C/N顺序为西坡(24.82) > 北坡(20.59) > 南坡(16.12) > 山顶(13.84); 10~20 cm土层内, 有机质含量的顺序为山顶(93.895 g/kg) > 西坡(70.319 g/kg) > 南坡(67.970 g/kg) > 北坡(63.255 g/kg), 全氮含量的顺序为山顶(5.528 g/kg) > 西坡(4.055 g/kg) > 南坡(3.867 g/kg) > 北坡(3.460 g/kg), 土壤C/N顺序为北坡(18.28) > 南坡(17.58) > 西坡(17.34) > 山顶(16.99)。不同生境之间的土壤有机质和全氮含量存在差异, 且0~10 cm土层高于10~20 cm土层。土壤有机质和全氮含量之间呈显著正相关。

关键词: 金佛山; 土壤有机质; 土壤全氮; 相关性

Contents and relationships of soil organic matter and total nitrogen under different habitats in Jinfo Mountain

CHEN Wei, YANG Guo feng, ZHAO Yun, ZHANG Miao miao

CHEN Wei, YANG Guo feng, ZHAO Yun, ZHANG Miao miao

Abstract:

The contents of organic matter (OM), total nitrogen (TN) and C/N ratio of soil under different habitats in Jinfo Mountain were studied and the results showed that the order of OM content in 0 to 10 cm soil layer was west slope (108.088 g/kg) > south slope (92.229 g/kg) > summit (89.727 g/kg) > north slope (80.881 g/kg). The order of TN content was summit (6.482 g/kg) > south slope (5.722 g/kg) > west slope (4.355 g/kg) > north slope (3.928 g/kg). The order of C/N ratio was west slope (24.82) > north slope (20.59) > south slope (16.12) > summit (13.84). While in 10 to 20cm soil layer, the order of OM content was summit (93.895 g/kg) > west slope (70.319 g/kg) > south slope (67.970 g/kg) > north slope (63.255 g/kg). The order of TN content was summit (5.528 g/kg) > west Slope (4.055 g/kg) > south slope (3.867 g/kg) > north slope (3.460 g/kg). The order of C/N ratio was north slope (18.28) > south slope (17.58) > west slope (17.34) > summit (16.99). It could be concluded that the contents of TN and OM were different among different habitats, and TN and OM contents in 0 to 10 cm soil layer were more than that in 10 to 20 cm soil layer. Moreover, the relationship between TN contents and OM contents in different habitats were significantly positive correlated.

Keywords: Jinfo Mountain soil organic matter soil total nitrogen correlation

收稿日期 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

扩展功能

本文信息

- Supporting info
- PDF(424KB)
- [HTML全文]
- 参考文献PDF
- 参考文献

服务与反馈

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- 引用本文
- Email Alert
- 文章反馈
- 浏览反馈信息

本文关键词相关文章

- 金佛山; 土壤有机质; 土壤全氮; 相关性

本文作者相关文章

PubMed

作者Email:

参考文献:

本刊中的类似文章

Copyright by 草业科学