



**SDI Review Form 1.6**

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| Journal Name:            | <a href="#">International Journal of Plant &amp; Soil Science</a>                     |
| Manuscript Number:       | 2014_IJPSS_13728  |
| Title of the Manuscript: | Influence of Use and Management of the Soil in the Attributes Chemicals of an Ultisol |
| Type of the Article      | Original Research Article   |

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**PART 1: Review Comments**

|                                     | Reviewer's comment   | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)   |
|-------------------------------------|--|---|
| <b>Compulsory</b> REVISION comments | <p><b>General comments:</b><br/>The manuscript illuminates different land use and management of the soil and the influence on soil quality in an ultisol in Brazil. The manuscript is excellently written and extent our present knowledge in an important area of research.<br/>Therefore I suggest that it should be published after some amendments on some unclear points.</p> <p><b>Specific comments:</b><br/><b>MATERIAL AND METHODS</b><br/>Three treatments were used representing natural vegetation (forest stand), area of cultivated perennial crop (monoculture of <i>Eucalyptus globulus</i>?) and degraded pasture land (grazed?).<br/>Three photographic pictures illustrate the different treatment areas (Figure 2).<br/>Give some more information about vegetation cover of dominant plant species and the land use history in the different treatment areas.<br/>If available I should like to read some information about depth distribution of the root systems in the different treatment areas.<br/>It seems that the most significant</p> | <p>The fibrous roots system (grasses roots) has a greater influence on the chemical characteristics of the soil in relation to the taproot system (eucalyptus roots).<br/>In relation the depth of influence of the roots is also verified that the fibrous root system, influence in the layer to 0.2 m of depth with greater intensity than the root system of Eucalyptus.<br/>Soil fertility data clearly demonstrate this effect in depth and types of root system.</p> <p>The lowest concentration of Ca and Mg in K in eucalyptus treatment is result of lower influence of roots and ground cover, due to the taproot system. In grasses (treatment degraded pasture) is the fibrous root system, influence in greater proportion. This effect of the grasses roots was verified by Bonini (2012).</p> |



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|   | <p>accumulation of organic matter takes place in treatment areas dominated by native vegetation!</p> <p>A monoculture of <i>Eucalyptus</i> seems to have a negative effect on soil quality!</p> <p>How do you relate these findings to root distribution at different soil depths?</p> |  |
| <b><u>Minor</u></b> REVISION comments   |  |  |
| <b><u>Optional/General</u></b> comments |  |  |