

## ***Interactive comment on “Biological control of the terrestrial carbon sink” by E.-D. Schulze***

### **Anonymous Referee #1**

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This manuscript is well written and comprehensive in that it covers plant photosynthesis, plant and soil respiration, and ecosystem level issues.

While the manuscript is comprehensive the paper is more written from a forestry point of view and does not as the title would suggest include biological controls of the terrestrial carbon sink. For example p. 1289 some research would suggest that perennial C4 grasses may have different partitioning of the C which may affect the contribution of the root and soil to respiration. Additionally annual plants would have a much different seasonal pattern. I believe it would be helpful to mention there are other systems that may be different.

In soil research has shown that soil properties, microbial activity and clay content and mineralogy are key properties in the retention of carbon at the ecosystem level. I think that this should be included in the paper.

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Interactive comment on Biogeosciences Discussions, 2, 1283, 2005.