Carbon Dioxide Removal in Coniferous and Deciduous Trees

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The purpose of this experiment was to determine whether coniferous or deciduous trees remove more carbon dioxide from the air per year (kg/year) to look into the factors of reducing global warming. The focus question was: Do coniferous or deciduous trees remove more carbon dioxide (kg/year)? To investigate this question, I took cores and measurements from 20 trees, 10 coniferous and 10 deciduous, with 5 trees being loblolly pines, 5 being red cedars, 5 being tulip poplars, and 5 being white oaks, and I cooked those down until they turned to carbon. Then, the carbon mass was weighed and compared to the dry mass. This ratio was used to determine the amount of carbon sequestered and the amount of carbon dioxide that the tree removed each year. This data was averaged together into each type of tree, coniferous and deciduous. A t-test was run on the data and the P value was under 0.01, which is less than 0.05, showing that there was a significant difference between the two types of trees. The deciduous tree, with an average of 80.00 kg/yr, removed more carbon from the air than the coniferous tree, 18.58 kg/yr.

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