Could lab-grown wood halt deforestation around the world?

[P]lant cells that have similar properties on mass to wood can be used to create materials that could be used to create everyday furniture items that appear to be fashioned from wood.

Early experiments, undertaken at the Massachusetts Institute of Technology, have shown how the <u>plant</u> tissue can be cultured indoors in conditions free from soil or sunlight. The starting material are cells derived from a flowering plant of the genus Zinnia, which grows in Mexico. By applying plant hormones, the cells can be combined to create a rigid structure.

By using technologies similar to 3D printing (bioprinting and injection molding), the cell mass can be altered into almost any shape. In the longer term, this could lead to the formation of a folding table without the need for any nails, screws, or wood glue.

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According to lead researcher Professor Luis F. Velásquez-García: "Plant cells are similar to stem cells in the sense that they can become anything if they are induced to."

He adds that: "The way we get these materials hasn't changed in centuries and is very inefficient", with reference to the proportion of land lost and trees felled across the past one hundred years.

"This is a real chance to bypass all that inefficiency", Velásquez-García concludes.

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