

Genetically engineered poplar trees break down more easily, hailed as environmental boon

Researchers have genetically engineered poplar trees with lignin that breaks down more easily, opening the door to cheaper biofuels and wood pulp that require only a fraction of the energy and chemicals to produce.

By inserting a piece of code isolated from a Chinese herb into the DNA of a poplar tree, scientists at the University of British Columbia, Michigan State and University of Wisconsin-Madison have produced a tree designed for easy deconstruction.

The code alters the chemistry of some of the bonds that hold together lignin, the organic polymer glue that makes trees tough and rigid and protects the energy-rich cellulose within cells. The genetically engineered poplars are every bit as strong as normal poplars while they are living, but when processed the lignin “unzips” where the altered bonds occur in the polymer chain.

Read the full, original article: [Genetically engineered trees hailed as an environmental boon](#)