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Título artículo: Characterization and antifungal properties against wood decaying fungi of hydrothermal liquefaction liquids from spent mushroom substrate and tomato residues.

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RESUMEN: This study aimed to investigate the potential of converting bio-based residues from industrial production of mushrooms and tomatoes into more valuable chemicals with antifungal properties using hydrothermal lique-faction (HTL). Liquid fractions were obtained from HTL of spent substrate of *Agaricus bisporus* (Lange) Imbach and *Pleurotus ostreatus* (jacq.) P. kumm., recomposted *Agaricus bisporus* spent substrate, and tomato residues. The quantitative 1H NMR spectroscopy analysis revealed that the HTL liquids of all residues contained antifungal constituents like phenols and organic acids. The HTL liquids at dilutions of 10 % were able to inhibit the fungi by over 80 %. Interestingly, the fungus *P. ostreatus* showed tolerance to these constituents as its growth was promoted at the lowest concentration of all the HTL liquids. The HTL liquids had lower ecotoxicity than the commercial wood preservative. These results suggest that the tested residues could be a promising source of preservative chemical constituents for the wood industry.

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