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Comparison of *Amylomyces rouxii* and *Rhizopus oryzae* in Lactic Acid Fermentation of Potato Pulp

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Amylomyces rouxii, the filamentous fungus widely used in the production of Asian fermented foods, is closely related to certain strains of *Rhizopus oryzae* secreting lactic acid. Among seven strains of *A. rouxii*, CBS 438.76^T most vigorously produced both lactic acid and ethanol from glucose, starch, and pectin in liquid media. When this strain was grown on apple peels and successively mixed with potato pulp, the concentration of lactic acid produced was lower than that produced by *Rhizopus oryzae* NBRC 4707. However, the growth of *A. rouxii* CBS 438.76^T acidified the pulp to less than pH 4, the level found in conventional silage fermented by lactic acid bacteria. *A. rouxii* may be preferable to *R. oryzae* for recycling potato pulp and other agricultural by-products into food materials because this fungus was being consumed long before written history, which attests to its safety for humans.

Keywords: [pectic substances](#), [polygalacturonase](#), [look-pang](#), [ragi](#), [fermented food](#)



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