



RESEARCH ARTICLE :

Solid state fermentation of tomato pomace waste by different lactic acid bacteria and yeast strains for quality and nutritional improvement

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SUMMARY : The study on solid state fermentation of industrial processed tomato pomace by different lactic acid bacteria viz., *Lactobacillus plantarum*, *L. acidophilus*, isolate *Lactobacillus* spp. and yeast strains viz., *Saccharomyces cerevisiae*, *S. boulardii*, isolate *Saccharomyces* spp. were evaluated for the nutritional improvement of tomato pomace. The results revealed that the tomato pomace fermented by lactic acid bacteria strain (*L. plantarum*) and yeast strain (*S. boulardii*) were found to be more efficient in reduction of pH (4.54 and 4.31 %), TSS (1.37 and 1.50 %) and enhancement in protein (16.15 and 17.89 %), fat (9.54 and 9.77 %), titrable acidity (1.16 and 1.78 %), energy (223.31 and 230.16 k.cal) and minerals of Ca (413.33 mg and 422.33 mg/100 g), Mg (342.67 mg and 342.33 mg/100 g), P (95.33 mg and 91.67 mg/100g) and Fe (15.00 mg/100 g and 13.67 mg/100 g) of the fermented tomato pomace, respectively. The results clearly indicated that the solid state fermentation of tomato pomace by lactic acid bacteria and yeast helps to enhance the quality and nutritional improvement with reduction in fibre of tomato pomace and which could be a good source of animal feed supplement.

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