

## Development of functional feedstuff using Cheju citrus-juice processing wastes

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### Abstract

During citrus juice processing, waste peel is produced after the extraction of juice from citrus fruits. The citrus peel waste was separated into the solid phase(27%) and liquid phase(73%) using cutting and extruding process. From the solid phase, citrus pulp pellet(CPP, a.w. 5%) could be produced by using pelleting and kiln drying process. The liquid phase was used as the culture medium. Several strains were selected from soybean paste foods. 48 strains hydrolyzed the pectin and their probiotic characteristics were evaluated by measuring cell growth, antibiotic activity and pancreatic enzyme activity.

Most of the strains were *Bacillus sp.* and grew upto  $10^9$  cfu/ml and showed antibiotic activity against *Staphylococcus aureus*, *Salmonella gallinarum*, *E. coli*. Also, selected strains produced amylase, protease, and lipase.

### References

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