Extraction of Starch from Differently Treated Horse Chestnut Slices

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Abstract
Starch was isolated from dehydrated Horse Chestnut slices dried at temperature of 50, 60, 70, 80 and 90°C and rehydrated chips (dried at 50 and 60°C) at rehydration temperature of 25 and 40°C. Optimization was done on the basis of starch yield. The highest yield was found in the sample dried at 50°C. Physicochemical properties of optimized starch were determined. Color values indicate that the starch was light in color with L value of 96.2. The starch was having a neutral pH with zero carboxyl content. The bulk density value was 0.85g/ml and sediment value was 36ml. Light transmittance showed a decreased trend with increased storage period of 120hrs. Syneresis and freeze thaw values were increased from 0 to 3.24 % and 0 to 20.21 % with storage period.

References

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Index Terms

Computer Science

Applied Science

Keywords

Horse Chestnut Starch  Bulk Density  Sediment Value  Paste Clarity  Color  Syneresis