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Comparative Study on Cross-linked Instant Sorghum Starch Prepared Via Alcoholic Alkaline Treatment and Extrusion Technique

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Background and Objectives

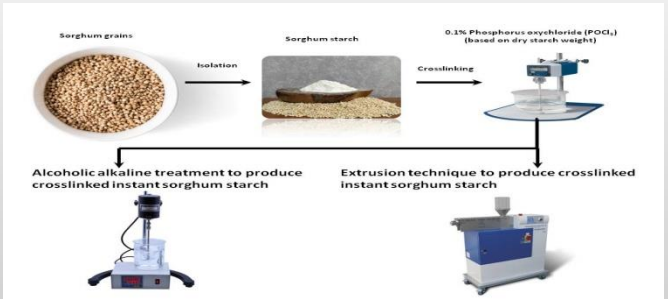
The aims and objectives of this study is

- *To cater the challenges local industries are facing by developing cross-linked (E1413) instant starch from our own novel indigenous and underutilized sorghum grains.*
- *To increase utilization of E1413 instant sorghum starch in food industries for desired food applications by precluding the need of heating assembly.*
- *To stand Pakistan in a queue of would-be exporter of E1413 instant starch due to abundant availability of sorghum grains.*

Experimental and Results

This study revealed that

- *Cross-linked instant sorghum starches are more resistant to acid, heat and shearing than their native instant starch.*
- *Drastic decline in swelling power was observed.*
- *Percent structural recovery of extruded starch was significantly reduced than AAT instant starch.*



Conclusion

- *The undesirable starch properties of instant sorghum starch were counteracted by cross-linking phosphorus oxychloride (0.1%) which could be used in different food products like sauces, frozen and many ready to eat foods.*

Reference

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