

## **Physicochemical and Functional Properties of Sour Starches from Different Cassava Varieties**

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### **Abstract**

This article reports our investigation on the effect of cassava varieties on the physicochemical and functional properties of sour starches. There were significant differences ( $P < 0.05$ ) in the ash, pH, amylose, amylopectin, starch damage, total titratable acidity (TTA), sugar, and starch content but not moisture contents of various cassava sour starches. There were no significant differences ( $P > 0.05$ ) in Water Absorption Capacity (WAC), swelling power, and solubility index, while significant differences were recorded in Least Gelation Concentration (LGC) and color at 5% level and granule size at  $P < 0.0001$  for cassava sour starches. Peak viscosity values ranged from 333.17RVU (clone 4(2) 1425) to 380.75RVU (clone TME 1). There were significant differences ( $P < 0.05$ ) in pasting properties except for pasting temperature and breakdown.