

**EVALUATION OF THE CHEMICAL, FUNCTIONAL AND PASTING  
PROPERTIES OF STARCH FROM TRIFOLIATE YAM (*Dioscorea dumetorum*)  
LANDRACES**

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**ABSTRACT**

This work was aimed at evaluating the chemical, functional and pasting properties of starches from fourteen trifoliolate yam landraces using standard methods. Starch yield ranged from 10.965% (in Nwaonyeukwu) to 20.481% (in Umudike). High amylose content was observed in most of the landraces except in Irok. The starch of Una-aro had the highest swelling index (1.16%). Una-nkporo and Ochuli had the highest gelatinization temperature (82.50°C) while Una-asaga and Ofuanya had the lowest (80.00°C). Una-nkporo had the highest peak viscosity and set back (356.790BU and 153.960 respectively). The high starch yield observed in GRU, Ojiobi and Umudike indicates a potential source of starch for manufacturing industries. The high peak viscosity and setback observed in Una-nkporo implies that it may be suitable for products requiring high gel strength, thick paste, elasticity and cohesive pastes.

**Keywords:** Trifoliolate yam, landraces, starch, functional and pasting properties.