Mylated Protein Isolates of some underutilized oil seeds and their Functional Properties

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Protein isolates of some oil seeds were extracted using alkali extraction and precipitation at the isoelectric point. Maleic anhydride was used to modify the protein at pH 9 under ice, to produce Maleyl lysine. The functional properties of the mylated proteins were determined using standard methods. The protein solubility of the products were very high at pH 11, with values ranging from 77.20 to 95.00 % soluble protein. They have low jellying ability with list jellying concentration ranging from 2 to 8 (%w/v). They are slightly hydrophobic with oil absorption capacity ranging from 1.94 ± 0.26 to 2.84 ± 0.26 (g/g) and water absorption capacity ranging from 3.50 ± 0.50 to 3.00 ± 0.00 (g/g).

