

P003 Proteomic characterization of Brazil nuts 2S albumin isoforms
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The major 2S albumin isoforms from Brazil nuts (*Bertholletia excelsa*) have been characterised using proteomics. Around 10 discrete isoelectric variants were identified. Their molecular masses were around 12 kDa and pI range was between 4.6 and 6.6, with one ≥ 7.0 . Following SDS-PAGE and MALDI-MS analysis the variants were shown to correspond to six different NCBI accessions. The isoform corresponding to sequence gi/99607, having previously only been identified at the nucleotide sequence level, had a slightly higher molecular weight (13.4 kDa). The heterogeneity of 2S albumins had been increased by post-translational processing. Evidence was found of cyclisation of the N-terminal glutamine residue in two isoforms, together with ragged C-termini, indicative of carboxypeptidase activity following post-translational processing. No evidence of glycosylation was found.