Effect of pH and ionic strength on extractability, foam and gelation properties of african yam beau (SphclJosy= *li§* §te~Jocarpa Hochsto EX A. Rich..) protein

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ABSTRACT

Effect of some food processing environmental conditions on extractability. solubility. foam and gelation properties of African yam bean *(Sphenost.\lis stenocarpa)* were studied. Increase in ionic strength increased extractability of S. *stenocarpa* protein. Minimum extractability was obtained at **pH** S which increased on either sides of this isoelectric point (**pH** S). **In** 1. SM ionic media. extractability of S. *stenocarpa* at isoelectric point significantly *(p<O.* OS) improved. Solubility of the isolated protein from S. *stenocarpa* flour also had increased solubility in the *pH* range 4~8 but reverse was the case at **pH** 3. The foam properties of the protein was significantly *(p<O.* OS) lower at isoelectric region than other pHs. This however improved with introduction of ionic species into the aqueous media. S. *sienocarpa* protein had least gelation concentration of 2% in all the ionic media considered. This is indication of good gelation attribute. thus S. *stenocarpa* protein can serve as a good food thickener.