



Research article

Extraction and physicochemical characterization of *Basella alba L* fruit mucilage and its comparative study

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Abstract

The revival of interest in natural products started in last decade due to the wide spread belief that they are healthier than synthetic product. Mucilages are the most commonly used pharmaceutical aid in pharmaceutical preparations. The ethno medicinal plant *Basella alba L.* belongs to the family Basellaceae, is a type of tropical herb which has been used for its medicinal benefits and is also known to contain complex polysaccharide called mucilage. In the present research work, mucilage was extracted from the fruit of *Basella alba L.* It was isolated using solvent precipitation method and characterized for its morphological properties and various identification tests were carried out. The dried fruits were reported to contain 4% w/w of mucilage whereas the fresh fruits contain 0.8% w/w of mucilage. Various physicochemical properties viz solubility, swelling index, melting range and pH of mucilage were studied. Some of the pharmaceutical properties of mucilage like powder flow property, compressibility index, angle of repose, bulk density were also studied. The water holding capacity and flow property of the mucilage from dry fruits was found to be better than that from fresh fruits. However solubility and pH of both the mucilages were found to be similar. The results indicate that mucilage obtained from the dried fruits of *Basella alba* has better qualities to be used as pharmaceutical excipient.