

NAME OF THE THEME: MEDICAL, HEALTH & PHARMACEUTICAL SCIENCES

Exploring Plant Derived Mucilages as Pharmaceutical Excipients

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Abstract:

Recent trends towards the use of natural mucilages demand the replacement of synthetic additives with natural ones. Today, the entire globe is showing interested in natural drugs and excipients because of their chemically inert, nontoxic, less expensive, biodegradable, and widely available. In the present investigation, we have extracted the mucilages from *Coccinia grandis* fruit (CG) fruit, *Rumex vasicarius* leaves (RV), *Fenugreek*(FG), *Colocasia esculanta*(CE), *Ziziphus maritiana*(ZM) and *Ziziphus jujuba*(ZJ) fruits successfully by using the industrially feasible technology i.e. precipitation method and subjected for evaluation of various physicochemical properties, micromeritics properties, FTIR, DSC, XRD, bioadhesive properties, gel strength and Viscosity. The results of the % yield, color, odor, taste, foreign organic matter, and moisture content, loss on drying, solubility, pH, and fracture and results are exhibited satisfactory. Furthermore, the extracted mucilages were evaluated for Molisch test, Ruthenium red test, Iodine test, FeCl₃ test, Silver nitrate test, Barium chloride test identification of mucilages and they are exhibited the presence of carbohydrates, mucilages and polysaccharides. The results of the said evaluation parameters indicated that the extracted mucilages are excellent excipients for pharmaceutical applications.

Keywords: Bioadhesive study, *Coccinia grandis*, DSC and Mucilages

References

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