

Special Issue: NCNN-2014

(National Conference on Nanoscience and Nanotechnology - 2014)

Formulation of Sustained Release Tablets of Glipizide using *Hibiscus Rosa Sinensis* Mucilage

Sanjib Bahadur, Pragya Baghel*, Amit Roy

Columbia Institute of Pharmacy, Vill. Tekari, Near Vidhan Sabha, Raipur (C.G), E-mail:
pragyabaghel88@gmail.com

www.peertechz.com

Glipizide is an oral hypoglycemic drug prescribed for type II diabetic patients. This work aims to use *Hibiscus rosa-sinensis* leaf mucilage mucilage for formulation of sustained release glipizide tablets. Mucilage was extracted from *Hibiscus rosa-sinensis* leaves using acetone. The extracted mucilage was dried and triturated to fine powder. Glipizide tablet were prepared by wet granulation using extracted mucilage in different proportion. The formulated tablets were subjected to various evaluations like weight variation, hardness, thickness, friability, appearance and *in vitro* drug release. Drug excipient compatibility study was conducted using FTIR. The physical evaluation tests of tablets were well within the accepted limit. Comparison of FTIR spectrum of pure drug and formulation confirmed that there was no chemical interaction. The *Hibiscus rosa-sinensis* leaf mucilage sustained the release of drug. However, further studies must be carried out to improve the potential of *Hibiscus rosa-sinensis* leaf mucilage as release retardant.