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Oroxylum indicum bark: Phytochemical investigation and *in vitro* anti-obesity potential

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In 21st century, obesity and associated complications has emerged as most grievous public health concerns. There is a continuous urge to develop anti-obesity agents. Present study involves the screening of 52 extracts of 13 plant materials of six selected plants for *in vitro* Pancreatic Lipase (PL) inhibition and anti adipogenic potential using 3T3 L1 pre-adipocytes. DCM and EtOAc extracts of *Oroxylum indicum* bark was found to be most active on both models and further selected for bioactivity guided phytochemical investigation. Bioactivity guided fractionation of EtOAc extract provided 7 fractions using vacuum liquid chromatography. Further chromatography techniques were provided three compounds from most active fraction III and characterized as oroxylin A, chrysin and baclein. All the compounds were active on anti-adipogenesis assay and moderately active on PL inhibition assay. Chrysin was most active among all three compounds. So, present study is an attempt to evaluate anti-obesity potential of Indian medicinal plants and identify their bioactive constituents.

Biography

Priyanka Mangal has received her BPharm from Dr Hari Singh Gour University, India and MPharm from National Institute of Pharmaceutical Education and Research, India. She is currently pursuing her PhD from National Institute of Pharmaceutical Education and Research, India under the supervision of Professor Kamlesh K Bhutani.

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