

Study of Chemical Components of Herbal Formulation of Neer Perukki Chooranam

Nushrath Roshana Mansoor¹ , Viviyan Sathiyaseelan²

¹*Department of Toxicology, Faculty of Siddha Medicine, University of Jaffna*

²*Faculty of Siddha Medicine, University of Jaffna*

The Siddha system of medicine is purely scientific and the peculiar complex system of science and philosophy. Fourier Transform Infrared Spectroscopy (FTIR) is certainly one of the most important analytical techniques for herbo mineral medicine. FTIR can be implemented during herbal drug development in production for process monitoring or in quality control laboratories. The aim of study is to evaluate the morphology and elemental characterization of the *Neer Perukki Chooranam*. The functional groups of their formulations are analyzed through FTIR spectroscopy and the biological roles of the functional groups are discussed in this study. The raw drugs is collected and purified as per Siddha literature. Drug *Neer Perukki Chooranam*, which has been illustrated in the Pharmacopeia of Indian Medicine for the management of *Neerkattu*, *Soabai* and *Makotharam*. The Fourier Transform Infrared Spectroscopy compounds show 13 functional groups. There are O-H Stretching (Alcohol), C-H Stretching (Alkane), O=C=O Stretching (Carbon dioxide), C-C bending, (Alkene), O-H bending (Carboxylic acid), C-O Stretching (Aromatic ester), C-O Stretching (Tertiary alcohol), S=O Stretching (Sulfoxide), C-H bending (1,2-disubstituted) and C-I Stretching (Halo compound) which ensures the therapeutic effect of the drug. The instrumental analysis FTIR study of *Neer Perukki Chooranam* is the presence of functional groups through the stretch and bends which is responsible for its functional activity. The functional groups in *Neer Perukki Chooranam* has diuretic activity. According to the FTIR analysis, the research drug "*Neer Perukki Chooranam*" is very effective for the indications of *Neerkattu*, *Soabai* and *Makotharam*.

Keywords: *Fourier Transform Infrared Spectroscopic (FTIR), Neer Perukki Chooranam, Siddha Medicine, Neerkattu, Soabai, Makotharam.*