7. PUBLICATIONS

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DEVELOPMENT OF RP-HPLC METHOD FOR SIMULTANEOUS ESTIMATION OF BERBERINE HCl AND GLYCyrRHETENIC ACID IN POLYHERBAL FORMULATION.

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ABSTRACT

A simple and rapid Reverse Phase HPLC method has been developed for the simultaneous quantification of BerberineHCl and Glycyrhetinic acid in Polyherbal formulation. HPLC analysis was performed on C18 column using a mixture of 0.5% Triethylamine and Acetonitrile pH 3.0 as isocratic mobile phase at a flow rate of 1.0ml per minute at detection wavelength of 230nm. The method was validated for accuracy, precision, linearity, specificity and sensitivity in accordance with International Conference on Harmonization guidelines. Good linear correlation coefficients (r2>0.999) were obtained for calibration plots in the range of 10–60μg/ml for BerberineHCl and Glycyrhetinic acid. Intraday and Interday RSD of retention times and peak areas were less than 2.0%. Recovery was between 95.05 % to 97.36 %. Validation revealed the method to be specific, accurate, precise, reliable and reproducible. The method was successfully used for quantitative analysis of these marker compounds in Polyherbal formulation.

Key words: Simultaneous determination; RP-HPLC; Glycyrhetenic acid; BerberineHCl; Polyherbal formulation.

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Development of validated RP-HPLC method for the estimation of L-Dopa from *Mucuna pruriens*, its extracts and in Aphrodisiac formulation.

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ABSTRACT

In the present study, reversed phase HPLC method was developed for the estimation of L-Dopa from *Mucuna Pruriens*, its extract and in Aphrodisiac formulation. HPLC analysis was performed on C18 column using a mixture of Water: Acetonitrile: Methanol containing 0.2 % Triethylamine pH adjusted to 3.3 as isocratic mobile phase at a flow rate of 1.0 ml per minute at detection wavelength of 280 nm. The method was validated for accuracy, precision, linearity, specificity and sensitivity in accordance with International conference on Harmonization guidelines. Validation revealed the method is specific, accurate, precise, reliable and reproducible. Good linear correlation coefficients $(r^2 > 0.999)$ was obtained for calibration plots in the range of 10 – 80 µg/ml. Intraday and Interday RSD of retention times and peak areas were less than 2.0 %. Average Percent Recovery was 98.83 %. The method was successfully used for quantitative analysis of this marker compound in Polyherbal formulation.

DEVELOPMENT OF VALIDATED RP-HPLC METHOD FOR THE
ESTIMATION OF WITHAFERIN – A IN WITHANIA SOMNIFERA, Its
EXTRACT AND POLYHERBAL FORMULATION.

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ABSTRACT
A simple, rapid and specific reversed phase HPLC method has been developed for the estimation of Withaferin - A in Polyherbal formulation containing Withaferin - A and its extract. HPLC analysis was performed on C18 column using mixture of Acetonitrile and Methanol containing 0.05 % Triethylamine as isocratic mobile phase at a flow rate of 1.0 ml per minute at detection wavelength of 227 nm. The method was validated for accuracy, precision, linearity, specificity and sensitivity in accordance with International conference on Harmonization guidelines. Validation revealed the method is specific, accurate, precise, reliable and reproducible. Good linear correlation coefficients (r² > 0.999) was obtained for calibration plots in the range of 5 – 30 µg/ml. Intraday and Interday RSD of retention times and peak areas were less than 2.0 %. Average Percent Recovery was 97.31 %. The method was successfully used for quantitative analysis of this marker compound in Polyherbal formulation.

Keywords: HPLC; Withaferin A, Withaniasomnifera, Indian ginseng, Polyherbal formulation.