"A COMPARETIVE ANALYTICAL STUDY OF *MANDUKAPRNI* (*Centella asiatica* Linn.) ACCORDING TO *NAKASHATRA*"

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AYURVEDA VACHASPATI

[Doctor of Medicine – Ayurveda]

Specialty – Dravyaguna

Scholar

Dr. DIPAL PATEL

Under the supervision of

Guide

Dr. REKHA PARMAR

Department of Dravyaguna

Parul Institute of Ayurveda

Parul University, Limda, Vadodara

Gujarat – 391760 (India).

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ABSTRACT

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INTRODUCTION: The importance of Nakshatra and its effect on the body was very well understood and recognized by the ancient Indian scholars. The science of collection and use of medicinal plants at particular Nakshatra was a rich heritage of we Indians but it is on a verge of extinctions. Study on the behavior of the plant and their effect on the human body is the need of the hour. Moreover, when the world is looking at Ayurveda for better answers. *Mandukparni* (*Centellaasiatica* Linn.) is one of the best and commonly available herbs used as intellect promotors, memory enhancer and can cultivate with less efforts. Hence, the present study was taken up to collect the four sample in different Nakshatra and pharmacognostically compare it with A.P.I.

METHODS: The plant materials were collected in four different Nakshatra -*Bharani*, *Rohini*, *Mrigsirsha* and *Pushya*. All the four sample of *Mandukparni* were subjected to Pharmacognostic evaluation which included Macroscopic and organoleptic evaluation, Microscopic evaluation, Physicochemical evaluation, Phytochemical evaluation and High-performance thin layer chromatography (HPTLC) as per standard method.

OBERVATION AND RESULT: In the present study, macroscopic, organoleptic and microscopic evaluation of the four samples showed no marked difference. In Physicochemical evaluation, of the four samples showed values within the pharmacopeial limit.Phytochemical evaluation revealed the presence of carbohydrates,alkaloids, tannins,flavonoids,glycosides and steroids in all the samples. Sample3-MG (*Mrigsirshanakshatra*) showed the highest water soluble and alcohol soluble extractives and in the estimation of HPTLC evaluation sample 4(*Pushya*) (5/@254nm and 9/@366 nm),showed highest bends have been observed.

DISCUSSION: *Mandukparni* (*Centella asiatica* Linn.) leaves taken out for the study and collected from the *Pushya Nakshatra* sample 4-PY (HPTLC) might be more potent and found better and superior result due to presence of more active principle based on the Pharmacognostic and Phytochemical study hence the study suggested *Centellaasiatica*Linn. Leaves should be collected in *Mrigsirsha* and *Pushya Nakshatra* for the therapeutic and medicinal use for the better results. Based on the findings the study also proposes that *Mrigsirsha* and *Pushya Nakshatra* also influences the potency of drug. Hence the variation in this study is proves the change in chemical constituent this study also supports the old theories that *Nakshatra* has effect on plants as mentioned in *Ayurvedic* lexicon.

CONCLUSION: After evaluating the four samples in different Nakshatra, it is concluded that though the samples have macroscopic and microscopic similarity, variation exists in the *Pushya* and *Mrigsirsha* samples regarding its water soluble and alcohol soluble extractives, Judged from the qualitative and HTPLC study of *Mandukparni*.The study also supports the concept that the collection of medicinal plant shows variations in their activity depending upon their time of collection i.e. different *Nakshatra*.

KEYWORDS: *Centella asiatica* Linn., Nakshatra, Pharmacognostic Study, Phytochemical study, HPTLC study.

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