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PREPARATION AND STANDARDIZATION OF A POLYHERBAL AYURVEDIC FORMULATION - NARACHA CHURNA

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Abstract: *Naracha Churna* is an ancient *Ayurvedic* formulation used in treatment of various diseases such as Constipation*(vibandha*), *Adhmana*, *Arsha* etc. Though mentioned in classic the formulation is not readily used and not readily available in market. Also there is no existing data is available for its standardization, pharmacognostic characters and microscopic features. Hence the present work intends for preparation and standardize of the herbal *Naracha Churna* by various physicochemical parameters

Keywords: *Naracha Churna* , Standardization, *Ayurveda*

Introduction: India is having a rich heritage of traditional medicine constituting with its different components like *Ayurveda*, *Siddha* and *Unani*. *Ayurveda* is a system of medicine which uses herbs, roots, and minerals for treating which is present abundantly in our country and unlike healing it also emphases on promoting and maintaining health in a healthy persons. The World Health Organization (WHO) estimates that around 80% of the word's population are still rely mainly on the traditional medicines for their health.[1,2] Along with this, the growing need for a safer drug, where attention has been drawn to the quality, efficacy, and standard of *Ayurvedic* formulations.[3] Development of *Ayurvedic* formulation with appropriate standardization and quality control is the first requisite in the present era that fulfills increasing demands of global population. Though traditional formulations are effective, there is no complete data is available for quality control and their evaluation. To overcome these problems there is a need to developed a standard parameter for preparation. *Churna* is one such *Ayurvedic* formulation that is defined as a fine powder of drug or drugs in *Ayurvedic* system of medicine. The *churna* is free flowing and retains its potency for one year, if preserved in an air tight container. They are similar to powder formulations in Allopathic system of medicine. In recent days *churna* is formulated into tablets in order to fix the dose easily. These forms of medicament are prescribed generally because of their particle size. Smaller the particle size greater is the absorption rate from G.I.T and hence the greater is the bioavailability [4].

Standardization of drug means confirmation of its identity and determination of its quality and purity and the term quality control refers to the sum of all procedures undertaken to ensure the identity and purity of a particular pharmaceutical. Pharmacognostic characters of herbal drugs play an important role since particular macroscopic features are unique for each plan. The macroscopic studies of the herbs should be the first and fundamental step to authenticate the botanical source.

Materials and methods:

The ingredients of *Naracha Churna* were purchased from GMP certified KLE *Ayurvedic* pharmacy and the raw materials were authenticated by experts from CRF of Shri BMK Ayurveda Mahavidyalya, Shahpur, Belgaum. During the preparation of the churna the ingredients i.e *trivritmoola, pippali, khandsharkara* were collected, dried and powdered individually and were passed through the sieve number 80/85 to prepare fine powder. Each of the 2 powders were weighed separately as per formulation preparation mentioned in the classics and mixed together uniformalily. After the preparation, further the Organoleptic Evaluation of the compound formulation *Naracha Churna* was done for the identification of physical characters like colour, odour, taste and texture. Active phytochemical constituents like glycosides, flavonoids, alkaloids, tannins were identified through chemical analysis and Qualitative analysis for total ash, acid insoluble ash, water and alcohol soluble extractive values and loss of drying at 105°c were carried out for the polyherbal *Ayurvedic* formulation. Thin layer chromatography (TLC) was also performed and R*f* values were also calculated for standardization parameters. Hygienic conditions were maintained by regular disinfecting of the working areas.

Table1: COMPOSITION OF *NARACHA CHOORNA*

SR.NO	Name of Ingredients	Botanical Name	Part Used	Qty
1.	*Trivruta*	*Operculinaturpethum*	Root	1 Part
2.	*Pippali*	*Piper longum*	Fruit	1 Part
3.	*Khandasharkara*	*Saccharumofficinale*	Exudate	1 Part

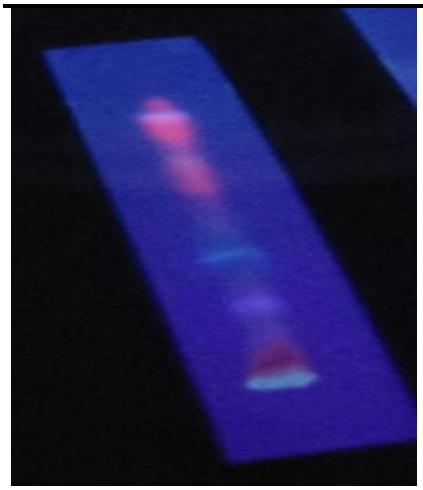
RESULT AND DISCUSSION:

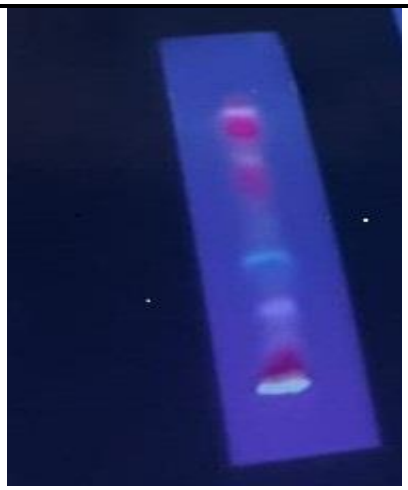
Description of Macroscopic Study: *Naracha churna* is a Creamish White fine powder with a characteristic odour and slightly sweetish in taste.

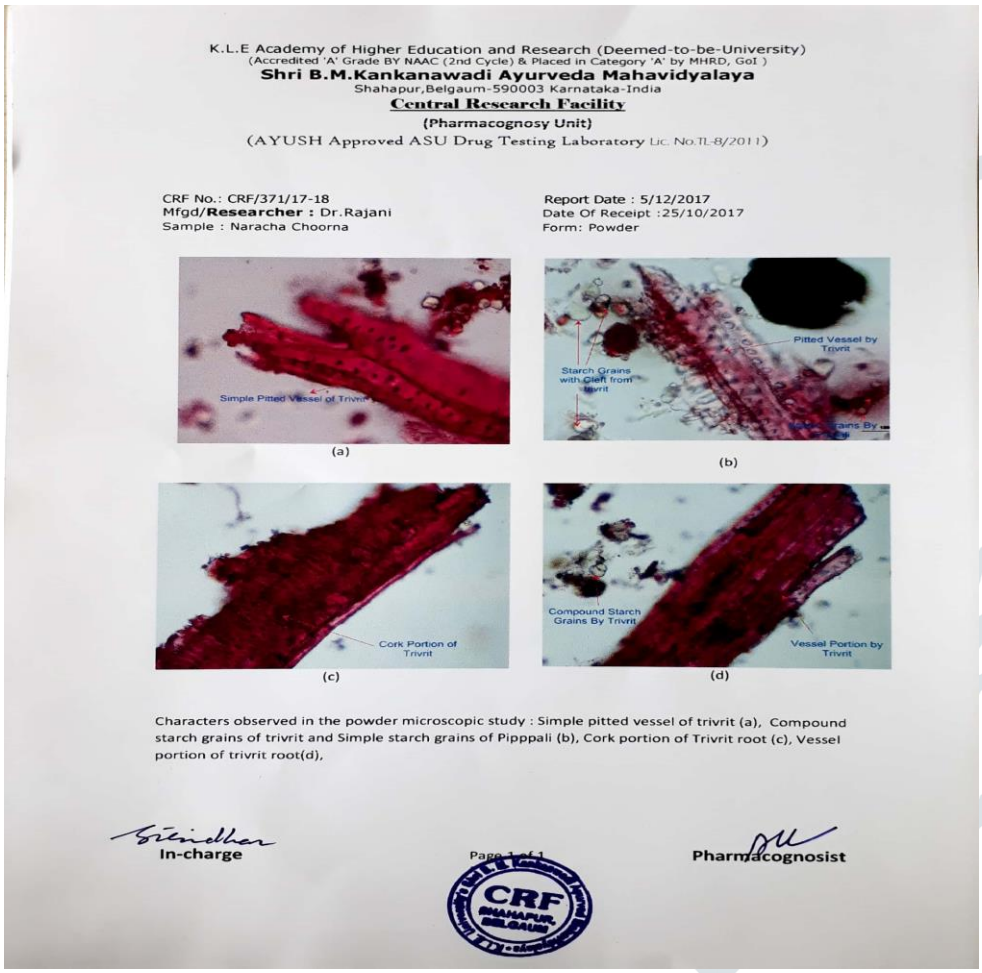
Evaluation parameter	observation
Color	Creamish
Odour	Characteristic odour
Taste	Slightly sweetish

Physio-chemical analysis and its parameters: Physio-chemical analysis shows 6.97% of moisture content. Ash content of the drug was 4.32% and 0.065% of acid insoluble ash. Alcohol soluble extractives 4.64% represent the extraction of polar constituents like flavonoids, alkaloids. The water soluble extractives 14.81% denotes the presence of inorganic contents.

Tests	Results
Loss on Drying	6.97
Ash Value	4.32
Acid Insoluble Ash	0.065
Water Soluble Extraction	14.81
Alcohol Soluble Extraction	4.64







Conclusion: *Ayurvedic* medicin *Naracha Churna* has been standardized by intervention of scientific quality control measures in the traditional preparation that has been describe according to the classicial texts. The pharmacognostic characters established for the raw material could be employed as quality control standards for evaluating its identity and can be used for routine analysis.

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