Plate 3.1

Natural Habitat

Collection of fruits
Plate 3.2

Broadly elliptic, 7.5-15 × 4.5-7.5 cm, 5-nerved, glabrous, shining

Dark gray or yellowish gray bark and minute tubercles
Plate 3.3

FRUIT

Globose, orange red when ripe

Fruit Coat

Fruit with Leaf
Plate 3.5

Preserved fruits & fresh seeds

Preserved dry seeds
Plate 3.6

Dried seeds

Size & Shape

Outer surface

Endosperm

Embryo

Seed coat
TRICHOMES

Surface irregularities in base of the trichomes cause them to interlock with one another.

The upper part of the wall of the trichome is composed of about 10 longitudinal ridges.

The upper portions of the trichomes are set almost at right angles to the bases and all radiate out towards the margin of the seed.

T.S shows Trichomes
Plate 3.9

Trichomes without stain

Trichomes with stain
Plate 3.10

Powder microscopy of raw seed

Oil globule

Trichomes

Starch grain

Aleurone grain

Polygonal endospermic cells

Brownish color content
Plate 3.13

Sample KGMDG  
Starch
Color content materials
Oil globules

Sample KKJ  
Starch
Color content materials
Oil globules
Plate 3.15

Sample KW

Sample KBW

Starch

Starch

Color content materials

Color content materials

Oil globules

Oil globules
Plate 4.1

Shodhana with Gomutra

Day-1
Seed coat removed
Cut into small pieces

Day-2
Seeds on Day-8
Plate 4.2

Shodhana with Godugdha

Pottali immersed in milk → Swedana in Dolayantra → Seed coat removed → Milk after Swedana → Cut into small pieces
Plate 4.3

*Shodhana with Goghrita*

- **Goghrita**
- **Frying process**
- **Seeds after frying**
Plate 4.4

Shodhana with Gomutra-Godugdha

Soaking in Gomutra

Swedana in Godugdha

Seeds after Swedana
Plate 4.5

Shodhana with Gomutra-Godugdha-Goghrita

1. Soaking in Gomutra
2. Swedana in Godugdha
3. Cotyledons cut into small pieces
4. Seed coat removed
5. Fried in Goghrita
Plate 4.6

Shodhana with Eranda taila

Frying in Eranda taila

Seeds swelled up

Seed coat turned reddish yellow in color
Plate 4.7

Shodhana with Kanji

Day-1 → Day-3

Removal of seed coat

Cotyledons cut into small pieces
Plate 4.8

Shodhana with Ardraka Swarasa

Paste of fresh Ardraka

Day-1

Day-3

Day-21

Day-15

Day-7

Cotyledons cut into small pieces
Plate 4.9

Shodhana with water

1. Soaked in water
2. Seeds swelled up
3. Removal of seed coat
4. Cut into small pieces
Plate 5.1

T. L. C PLATES OF THE SAMPLES

Under 254 nm

Under 366 nm

After spray
Plate 5.2

HPTLC DENSITOGRAM

All tracks 3D-at 254 nm.

Spectra comparison-
Strychnine

Spectra comparison-
Brucine
Plate 5.3

Calibration curve of Strychnine

Calibration curve of Brucine
Plate 5.4

HPTLC Profiles

Multi wave length

KR

KGM

KGD

KGG

KGMD
Plate 5.5
HPTLC Profiles

KGMDG

KKJ

KET

KAS

KW

KBW
Effect of Shodhana (processing) on Kupelia (Strychnos nux-vomica Linn.) with special reference to strychnine and brucine content

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Abstract

Kupelia (Strychnos nux-vomica Linn.) commonly known as nux vomica is a poisonous plant used extensively in various Ayurvedic formulations, with great therapeutic significance. Ayurvedic practitioners using Kupelia (Strychnos nux-vomica Linn.) and other methods are also adopted by the traditional practitioners using similar and different methods (e.g., lady's tea, ginger juice, and other herbs) in the purification of Kupelia (Strychnos nux-vomica Linn.). In the present study, an attempt has been made to quantify the yields of purified Kupelia (Strychnos nux-vomica Linn.) by two different methods (two classical and another traditional) using Kupelia (Strychnos nux-vomica Linn.). The study reveals that both the methods studied reduced the strychnine and brucine contents in comparison to the raw sample as determined by high-performance liquid chromatography (HPLC) and the strychnine content was reduced by 39.23% and 57.42%, respectively, and the brucine content in the purified sample was also found to have decreased by 57.63% and 40.06%, in comparison to the raw sample.

Key words: Arobinda bhasma, Arobinda bhasma, Kupelia, Shodhana, strychnine.

Introduction

There are many poisonous plants reported in the ancient scriptures of Ayurveda, which are still in use today, to combat a number of diseases. Among these, Strychnos nux-vomica (Strychnos nux-vomica Linn.) is such a plant described under the Ayurvedic system of medicine. The plant's seeds are toxic in nature and are used in various Ayurvedic formulations, including ayurvedic drugs. Strychnos nux-vomica is known to be a good source of strychnine and brucine, both of which are potent alkaloids. Strychnine is a powerful convulsant and has a very high toxicity, while brucine is a cardiac stimulant.

Specific Shodhana (purification) procedures have been adopted for the purification of Strychnos nux-vomica, and these methods are often practiced in the classical Ayurveda or practiced traditionally. The concept of Shodhana is not only a process of purification in Ayurveda, but it is also a process of enhancing the potency and efficacy of the drug. Different studies have reported that nux vomica contains nux vomica, and it is rich in alkaloids such as strychnine and brucine. Nux vomica is a potent cardiac stimulant, and its alkaloids have various medicinal properties. However, the methods of purification have been largely empirical.
EFFECT OF PURIFICATORY MEASURES THROUGH COW’S URINE AND MILK ON
STRECHININE AND BULSHINE CONTENT OF KUFELU (STRECHINUS KOFISHIAE LINN.)
SEEDS

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Abstract

Strechus kofishiae Linn (Amaranthaceae) commonly known as Kufelu (Kofishia), a poisonous plant and its seeds are widely used in Ayurvedic practice since times immemorial. Ayurveda advocates that the use of plant species which are poisonous, are administered in therapeutic doses. The effect of cow’s milk and cow’s urine on the toxic alkaloids of this plant was examined in this study. The method of preparation of cow’s milk and cow’s urine was standardised in this study. The cow’s milk was prepared by giving cow’s milk to the cow for 7-10 days. The cow’s urine was prepared by mixing cow’s milk and cow’s urine in a ratio of 1:1. The cow’s milk and cow’s urine were then tested on the toxic alkaloids of Kofishia seeds. The results showed that the cow’s milk and cow’s urine reduced the toxic alkaloids of Kofishia seeds. The results showed that the cow’s milk and cow’s urine were effective in reducing the toxic alkaloids of Kofishia seeds. The results showed that the cow’s milk and cow’s urine were effective in reducing the toxic alkaloids of Kofishia seeds.

Key words: Ayurveda, Strechus kofishiae, Kufelu, Kofishia, cow’s milk, cow’s urine

Introduction

Strechus kofishiae Linn (Amaranthaceae) is a commonly used plant in Ayurveda and its seeds are being used extensively in the preparation of different chemical formulations. Strechus kofishiae Linn is a poisonous plant and its seeds are known to contain toxic alkaloids. The toxic alkaloids of Strechus kofishiae Linn are known to cause various health problems when consumed in excess (1). The toxic alkaloids of Strechus kofishiae Linn are known to be reduced when consumed in therapeutic doses. The results showed that the cow’s milk and cow’s urine were effective in reducing the toxic alkaloids of Kofishia seeds. The results showed that the cow’s milk and cow’s urine were effective in reducing the toxic alkaloids of Kofishia seeds. The results showed that the cow’s milk and cow’s urine were effective in reducing the toxic alkaloids of Kofishia seeds.

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Role of Castor oil in Processing (Shodhana) of Kapeela (Strychnos nuxvomica Linn.) Seeds: An Approach of Traditional Ayurveda

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Abstract

Seeds of Strychnos nuxvomica Linn. (Loganiaceae), a poisonous plant drug, is being used in different Ayurvedic therapeutics after proper processing (Shodhana) with some specific media. As per the available references in Ayurvedic classics, media like cow’s urine, cow’s milk, cow’s plasma, etc., has been incorporated for processing of Nux-vomica seeds. Apart from the classical methods some other methods are also implemented by the traditional practitioners of Ayurveda using castor oil (Eranda taila), ginger juice (Adirkheda rasana) etc. for the same purpose. In present study an attempt has been made to process the seeds by executing a traditional method employing Eranda taila (castor oil) as the medium. This study revealed that the method studied reduces the toxic Strychnine & Brucine contents by 67.30% and 46.97% respectively in comparison to the raw Nux-vomica seeds as determined by HPTLC.

Key words: Kapeela, nuxvomica, purification, processing, Strychnine, Brucine.

Introduction:

Kapeela (Strychnos nuxvomica Linn.), a well known plant in Indian system of medicine is being used extensively in different classical formulations with great therapeutic significance. Though the plant is described under the 'Upshema Pargara' (bush poisonous group) (1), it’s seeds have been used successfully in different formulations to combat different diseases after proper Shodhana (processing or purification) (2). The seeds are mainly used as aphrodisiac, appetite stimulant. Further the seeds are also used in anemia, asthma, bronchitis, intermittent & malarial fever and in weakness of extremities (3). Nux-vomica was introduced in Europe in the sixteenth century, but was not much used in medicine, being chiefly employed to poison dogs, cats, cows, etc (4). It is claimed in the ancient manuscripts of Ayurveda that the 'Pitha' becomes 'Ayurveda' after logical use of (5) and the physicians of Ayurveda successfully employed this drug in a number of diseases after proper purification in some specific media.

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EVALUATION OF THE PHARMACODYNAMIC EFFECTS OF THE EXTRACTS OF BOOKWORM L中国大陆兔 (COCCINELLIDAE) ON THE GASTRIC MUCOSAL TISSUE IN RATS
A Comprehensive Review on Therapeutic Utilities and Purificatory Procedures of Strychnos nux-vomica Linn. (Kupelia) as Described in Indian Systems of Medicine

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ABSTRACT

Strychnos nux-vomica Linn. (Loganiaceae), known as Kupelia in Ayurveda, has been commonly employed in Ayurvedic pharmacopoeia since long. It is a deciduous tree widely distributed in India and found throughout tropical India and additionally in Sri Lanka, Thailand, Cambodia and Vietnam. In this review, an extensive study has been made to explore the therapeutic utilities of Strychnos nux-vomicae and to put emphasis on especially different methods of purificatory procedures mentioned in Ayurveda. It is observed that seeds of Strychnos nux-vomica are used as an ingredient of compound formulations of Ayurvedic tonics of medicine indicated for nervous debility, paralysis and weakness of limbs, sexual weaknesses, dyspepsia, constipation and chronic dysentery. Additionally, it is employed in the treatment of asthma, asthma, bronchitis, cough, intermittent fever, fevers, etc. in a specific therapeutic dose. In rather doses, it produces tonic and curative actions ultimately resulting in death. Kupelia has been described as a toxic plant in Ayurveda and current purificatory procedures (Shodhana) of the seeds are considered mandatory before its administration.

Keywords: Kupelia, nux vomica, strychnos nux-vomica, Shodhana.

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1. INTRODUCTION

Kupelia (Strychnos nux-vomica Linn.), a well-known plant in Ayurveda since long, is being used extensively nowadays in numerous classical formulations with great therapeutic significance. Though the plant is described under the “Uparasa Varga” (semi-precious group) [1], it has been used successfully in the management of several diseases after proper Samahar called shodhana/purificatory procedures[2]. Kupelia was not reported in the “Vishnuprayoga” texts of Ayurveda but later it was mentioned in different Nighana with a number of synonyms. Its uses in Ayurveda were recorded from the period of "Brindâlalâdhesha" D[3] A.D.). The drug Vimanam was mentioned in the English translation of Brindâlalâdhesha Vimanam edited by P. V. Trinath, while describing "Vishnuprayogikshana". Later different authors mentioned it with a number of synonyms. Synonyms like Vitandula, Kupelia, Vimani, etc. indicate toxic nature of this tree. On the other hand, European countries started using this plant from sixteenth century onwards; however, it was not abundantly utilized in drugs but was chiefly utilized to petrosel dogs, cats, cows, etc. [4].

Kupelia is found throughout tropical India up to an altitude of 300 m and most typically in...