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Nyctanthes Arbor-Tristis Linn: A Herbal Lotion Formulation Using Calamine As Base

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ABSTRACT:
Herbal cosmetics are made by combining various cosmetic materials as the base, and then adding one or more herbal compounds to treat a range of skin conditions. By their very name, herbal cosmetics imply that they are all-natural and free of synthetic ingredients that could otherwise be damaging to the skin. Naturally derived cosmetics are safer to use than conventional beauty products. Cosmeceuticals are hybrid cosmetic-pharmaceutical solutions designed to target specific skin conditions, such as acne, wrinkles, and sun protection, in order to enhance the skin's health and appearance. Because of its cooling and calming properties, calamine lotion is frequently used as a protective and antibacterial for a variety of skin conditions. Different plant parts and extracts, such as Nyctanthes arbor-tristis linn, are utilized in place of conventional synthetic treatments for a variety of purposes, including relieving burning sensations on the skin.The remedies used to improve a person's look are called herbal cosmetics.

KEYWORDS: Nycthantes Arbor-Tristis, Calamine, Lotion, Herbal Formulation.

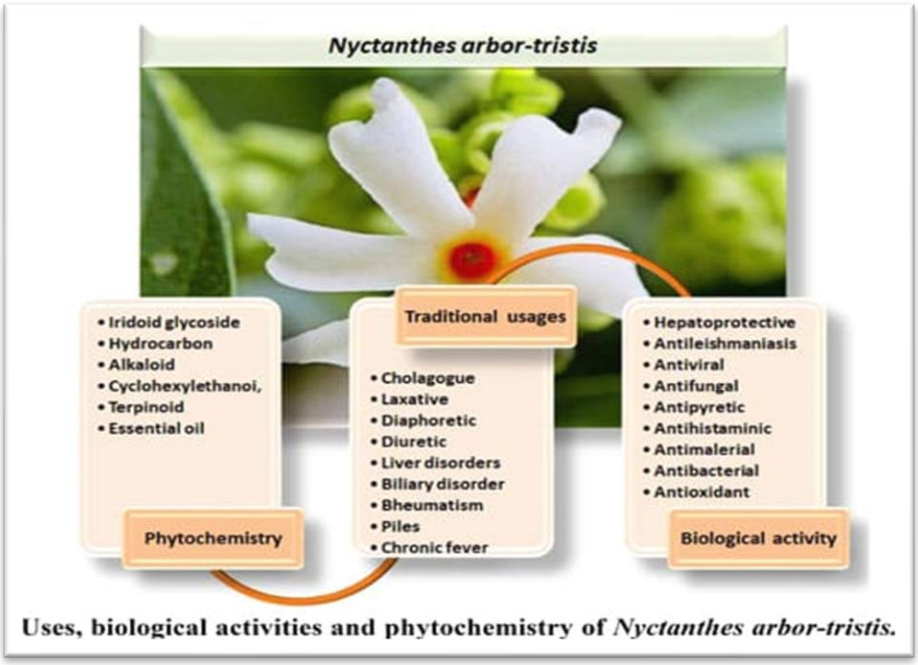
INTRODUCTION:

The idea of cosmetics and beauty has existed since the beginning of mankind. Herbal cosmetics are typically also known as natural cosmetics.[1,2] Herbal cosmetics are made by combining a variety of cosmetic components to create a base, and then adding one or more herbal compounds to treat different types of skin conditions.[3,4] The term alone suggests that herbal cosmetics are all-natural and free of any dangerous synthetic ingredients that would otherwise end up being poisonous to the skin.[5,6] These products use various plant parts and plant extracts in place of conventional synthetic ones, such as Nyctanthes arbor-tristis (Night Jasmine).

Fig.1. Nyctanthes arbor-tristis [7]

Name Of Plant: Nyctanthes arbor-tristis.
Synonym: Night Jasmine.
Family: Oleaceae.
Kingdom: Plantae.
Order: Lamiales.
Genus: Nyctanthes. **Species:** N.arbor-tristis.[8]

Fig.2. Uses,biological activities & phytochemistry of Nyctanthes arbor-tristis.[9,10]



Uses, biological activities and phytochemistry of *Nyctanthes arbor-tristis.*

In pharmacy, liquid dose forms are either biphasic or monophasic.[11] Two categories of monophasic liquid dose formulations are distinguished:

1. Liquid for Internal application.[12]
2. Liquid for External application.[13]

Lotions are topical liquids that are meant to be administered on intact skin without causing friction. These are suspensions or solutions made of water, alcohol, or polyols that contain medicinal agents that are topically active.[14] Two examples of lotions are amphotericin B lotion [15] and calamine lotion.[16] The label states.

1. The names and concentrations of the active substances.
2. Lotion is only meant to be applied externally.
3. Before using, the lotion should be well shaken.
4. The final deadline after which the lotion should not be applied.
5. The ideal storage conditions for the lotion. 6. The guidelines for utilizing the lotion
6. Any extra safety measures needed when using the lotion. [17,18,19] The lotion is a liquid formulation designed to be applied to the skin without causing friction. They are directly applied to the skin. The lotion is classified as protecting, antiseptic and relieving burning sensation. The container needs to be "For external use only" written on it. Long-term use of lotion can occasionally cause it to separate out. Thus, "Shake well before use" must be written on the container. [20,21,22] This study aims to highlight the uses of the herbal lotion of Nycthantes arbor-tristis as relieving a burning sensation. [23,24]

MATERIAL AND METHOD:

Ingredients:

TABLE 1. Description of ingredients used in preparation of Herbal Lotion

Sr.no.	INGREDIENTS	CATEGORY
1.	Nycthantes arbor -tristis	Relieving burning sensation
2.	Calamine (extra pure confirming to B.P)	Astringent
3.	Zinc oxide (confirming to I.P)	Protective
4.	Bentonite (Aluminium silicate hydrate)	Suspending agent
5.	Tri sodium citrate (Dihydrate extra pure)	Chelating agent
6.	Liquefied phenol (Carbolic acid crystals)	Antiseptic/ Preservative
7.	Glycerine	Soothing effect
8.	Purified water	Vehicle

METHOD OF PREPARATION:

Preparation of Herbal extract i.e., Nyctanthes arbor-tristis by the decoction process using water as solvent.

Figure.3. Extraction process.

The Lotion was prepared in a mortar pestle by trituration method with the herbal extract. required quantity of Calamine, zinc oxide, and bentonite with the solution of trisodium citrate in about 70% of water was triturated and at last liquefied phenol along with the Herbal extract used was added to the mixture with sufficient purified water to produce 100 ml. [26,27]

Figure 4: formulation

Description of herbal extract:

TABLE 2. Description of Herbal extract used.[28]

Natural/ Synthetic	Natural
Source	Flower of Night Jasmine
Chemical constituents	Essential oil, nyctanthin, d-mannitol, tannin, glucose, carotenoid, glycoside, etc.
Properties	It is pale yellow to brown in color, characteristic odour, slightly basic
Uses	Relieving burning sensation, antibacterial, soothing effect, anti-inflammatory, antioxidant

Formulation:

TABLE 3. Formulation table.

Sr.no.	INGREDIENT	QUANTITY
1.	Calamine	15gm
2.	Zinc oxide	5gm
3.	Bentonite	5gm
4.	Tri sodium citrate	0.5gm
5.	Liquefied phenol	0.5gm
6.	Glycerine	q.s
7.	Herbal extract	5ml
8.	Purified water	100ml (q.s.)

RESULT:

Evaluation:

TABLE 4. Evaluation of lotion

SR.NO.	PARAMETER	OBSERVATION
1.	Color	Creamish
2.	pH	7.9
3.	Skin sensitivity	Does not cause any allergies, rashes, etc.
4.	Odor	Characteristic
5.	Spread ability	Easily spreadable
6.	Greasiness	No
7.	Herbal residue	Nil

CONCLUSION:

Here is the work done it has been concluded that Herbal natural extract with a calamine base can be prepared. It does not show any allergic or rashes when applied. It is slightly basic which is similar to skin. It is easily spreadable with a characteristic odor. It is mainly used for relieving burning sensations, reducing

itching, giving a soothing effect, etc.

FUTURE SCOPE:

It can be used in anti-inflammatory, anti-bacterial, diuretics, antipyretic, antioxidant, etc. due to active constituent like glycoside, d-mannitol, essential oil, nyctanthin, etc.

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