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Literature survey of black nightshade (*Solanum Nigrum* Linn)

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ABSTRACT

Night blackshade (Solanum Nigrum) is an important Medicinal plant widely used in the unani system of Medicine. (Family – Solanaceae). The plants are cultivated throughout the country in dry part. Common in cultivated lands, road sides and garden. The plants are prescribed in various ailment like – Ascites, Piles, Chronic Cirrhosis of the liver, Gonorrhoea, Gouty joints and various skin disorders. Through this paper, effort has been to collect the information on Medicinal properties of Mako (Solanum Nigrum) plant species.

Keywords: *solanum nigrum linn, manathakkali, black nightshade, makho.*

1. INTRODUCTION

Solanum Nigrum (L.) is commonly known as night black shade or Makho is belonging to the Solanaceae family. Its two varieties are found, one is bearing black fruit and other one has reddish brown colour fruit. In both varieties species. Black colour fruits are toxic. The whole plants, leaves and roots are used to health point of view. All the parts of the plants are used in the therapeutic effects from ancient periods. These plants are one of the largest and most variable species in the genus. Various components are identified which are responsible for the diverse activities. Makho is widely used in many traditional system of medicine but are not able to attention for their modern therapeutic use.

2. BINOMIAL CLASSIFICATION

Kingdom : plants
Subkingdom : vascular plants
Super division : seed plants
Division : flowering plants
Class : dicotyledons
Subclass : solanales
Genus : nightshade
Species : black nightshade

3. FAMILY

Solanaceae

4. VERNACULAR NAME:

Tamil : Manathallaki, Milagathakkali, Manatakkali

Telugu : Kasaka

Urudu : Makoya

English : Black night shade

Hindi : Makoi

Malyalam : Milagu Thakkali

Assamese : Kochi, Los Kochi.

5. LOCAL NAME:

Argentina : Yerba Mora, Taiwan : Lung – kwel,

USA : Black night shade, Pakistan : Kanper makoo,

Denmark – Sort natskgge , India : Makhoi,

nunununia, Australia : Black berry night shade.

6. BOTONICAL DESCRIPTION

Black nightshade is a common herb (or) short lived perennial sherb. They are found in many wooded area and disturbed habitats. It reached the height is 30 to 120cm (12 to 47 inches), leaves 4.0 to 7.5cm (1.6 to 3.0 inches) long and 2 to 5 cm(1 to 2 inches) wide. They are ovate to heart shaped. The wavy (or) large – toothed edges. Both surface are hairy (or) hairless. The petiole 1 to 3 cm (0.5 to 1 inches) Long with a winged upper portion. The flowers have petals and they are greenish to white recurved when aged. Then they surround prominent bright yellow anthers. The berries are mostly 6 to 8mm (0.24 to 0.31 inches) in diameter, dull black or purple-black. In India, the another strains berries are found with the berries that are turned red when ripe.

7. DISCRPTION OF SOLANUM NIGRUM:

Solanum nigrum is a widely used drug in the form of different systems of medicine. They are prescribed in the various disease to cure. The general description of drug given below:

- Temperant: cold 2°- dry 2°, seeds are germinate the alternative temperature like (20 to 30°C)
- Taste: pungent and bitter, Root (powder)- tasteless
- Colour: fruits-green colour, dry-red colour; leaf-green colour; root-creamish in white colour; seed-white, yellow, brown.
- Odour: characteristic odour and pleasant.

8. PARTS USED

Leaves, fruits, berries, stem, root.

9. RECORDED USE

Australia :- the vegetables are used in old cultures in NW. The chads are eaten by birds.

Ethiopia :- the fruits and leaves are edible. When the edible fruits are black (or) violet.

Nigeria :- the leaves are used as a spinach.

Tanzania :- leaves are boiled and vegetables are eaten. Green fruits are edible, roots are eat raw for the stomach ache.

10 DOSE

7 to 10 grams

11. ACTION

- ✓ Anti-inflammatory
- ✓ Antiemetic
- ✓ Antidiarrheal
- ✓ Antidycentric
- ✓ Pain killer for headache
- ✓ Carminative
- ✓ Demulcent

12. USE

- ✓ Gastritis
- ✓ Hepatitis
- ✓ Arthritis
- ✓ Ophthalmia
- ✓ Skin disease

13. CHEMICAL CONSTITUENTS

The chemical constituents are found in

- ✓ Glycol alkaloids
- ✓ Sola margine
- ✓ Solasonine
- ✓ Solanine
- ✓ Alpha and beta solamargine
- ✓ Solasodinsolanidine (0.09 to 0.65)

14. PHARMACOLOGICAL ACTIVITIES:

Antimicrobial activity:

Khizar abbas et al., study was investigated the antimicrobial activity of pet ether, acetone, chloroform, dichloromethane and water extraction of two solanaceous plants. On the basis of results are obtained, it include the methanolic extracts of plant species against all the micro organism. The current study are the possible of antimicrobial as well as antifungal activity of fruits extracts of the plants.

Antibacterial activity:

Kavishankar et al., (2011) studied on the antibacterial activity of the methanol and water extracts of solanum species. They are all against with microorganisms are E.Coli, staphylococcus aureus, entero bacteriaerogenes. On the results are obtained the methanolic extracts of SO leaves the best result for antibacterial activity.

Antifungal study:

Praksah and jain (2011) the studies are conducted to evaluate the presence of novel bio active components against fungal pathogens. The preliminary phytochemical constituents showed the presence of alkaloids, flavonols, flavones, flavonols, saponins and steroids. On the basis of results to showed the presence of these bio active components of SO against fungal infections.

Antiulcer study:

Jainu and devi (2006) investigate to the antiulcerogenic activity of the methanolic extracts of SO berries on aspirin induced with rats to ulceration with respect to antioxidant in the gastric mucosa. The study of the results are indicated that berries of the SO exert it gastro protective effect by a free radical scavenging action.

In vitro antibacterial activity:

Sridhar et al., (2012) performed on six solvent extracts of seeds, leaf and roots of SO for in vitro antibacterial activity and phytochemical screening. The organic solvent extracts of seeds are very strong antibacterial activity as compared to lead and root solvent extracts. The results are obtained to show the strong activity of the ethyl acetate seed extracts was against pseudomonas, proteus vulgaris, klebsiella.

Nutritional study:

Akubugwo et al., (2007) evaluate the study of nutritional potential of the leaves and seeds are sloanum nigrum L. Varvirginicum. The indicate the protein content of the leaves and seeds as 24.90% and 17.63% respectively. The level of cyanides are found in leaves are higher as compared to the seeds. The study of the results are some of the antinutritive compound like oxalate, solanum nigrum L. Varvirginicum to be nutritive.

15. CONCLUSION

The revealed that paper the therapeutic importance of solanum nigrum as evident and they recent research are performed on it. The plant of makho are the most important are indicated in liver, kidney, stomach and the joint diseases etc. the recent research scholars are validated the plants are used in hepatitis, arthritis, anti inflammatory, liver tonic, various skin disease are include. Many phytochemical and pharmacological studies are performed on the drug for its present time.

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