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## Medicinal importance (Antiseptic property) of *Solanum virginianum* L

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### Abstract

*Solanum virginianum* L. of (Solanaceae) is an important Indian medicinal plant. It is widely distributed in various parts of India. In Rewa region it is found in barren fields, agricultural fields and hilly areas. It is well known for its medicinal values in the Sidha and Ayurvedic system of Indian medicine. Plants are collected only from its natural habitats for medicinal use. The plant contains antiseptic property.

**Keywords:** Medicinal, antyseptic, *Solanum virginianum*

### Introduction

Sepsis is the purification of festering wounds, which is usually caused by bacterial contamination. Therefore, antiseptics are the natural or synthetic substances meant for the counter action of sepsis especially by inhibiting growth of bacteria. Now a days variety of natural and man made chemicals are extensively used as antiseptics in the form of ointments, dusting, powders and lotions. But there are galaxy of ethnic communities which are far beyond the reach of modern antiseptics and treat minor to major wounds of their pets and own with the help of various plant parts products.

Rewa is located at 24°32' N 81°18' E. It has an average elevation of 275 meters (902 feet). Various information's related to the antiseptic property of plants were gathered. To get first hand authentic information (Ambasth, 1986; Jain, 1991; Maheshwari & Singh, 1987; Saxena & Vyas, 1981; Hassan, 2012 and Kumar 2014) <sup>[1-6]</sup> have been consulted. Out of lots some were pharmacologically tested on animals for their authenticity and relative potential.

### Material and Methods

*Solanum virginianum* L. (Family Solanaceae) is a perennial diffuse very prickly herb. Leaves ovate-elliptic or oblong, pinnatifid, stellate hairy when young, segments ovate, irregularly dentate. Flowers violet, in 2-6 flowered cymes; calyx and corolla stellate hairy. Fruits globose, green, white mottled. Flowering and fruiting throughout the year (Verma *et al.* 1985) <sup>[7]</sup>.

Furacin (Eskayef) is a common topical anti-infective preparation available in dusting powder and ointment forms. For the present work Furacin ointment was selected, which contains Nitrofurazone 0.2% w/w and is used as dressing on burns and wounds.

**Table 1:** Observation

Dog	Treatment	Dose	Healing time	Unusual observation	Magnitude of efficiency
A	With Furacin ointment	Once daily	9 days	Nothing	*
B	With fruit pulp	Once daily	7 days	Slight irritation as per application	***
C	No treatment	-	No healing	Sepsis & Maggerial appeared	-

Three male dose of almost same age were selected as experimental animal and they were named as A, B and C. From the upper portion of neck of every dog a patch of hair in 2 cm diameter was removed with the help of razor and hypodermic wound and 1.5 x 0.5 cm was made. The upper portion of the neck was selected because, the dogs generally cure their wounds by licking them, but it can not be licked.

The wound of dog 'A' was treated with Furacin ointment, while of 'B' with fruit pulp of *Solanum virginianum* L. and 'C' left untreated.

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## Results and Discussion

Healing is a physiological phenomenon of tissue but it is interrupted by the bacteria, causing sepsis. When bacterial growth is checked by antiseptic, the wound heals very fast. Thus antiseptics stop the bacterial growth due to their bacteriostatic property.

Through present experiment it can be concluded that the fruit pulp of *Solanum virginianum* L. has more antiseptic efficiency than the Furacin ointment because the wounds of equal size and age healed very fastly (7 day) when treated with fruit pulp. However, when the wound was treated with Furacin ointment it took 9 days to heal.

Observation of irritation after the application of fruit pulp may be due to the crudeness of the material.

Since the maggots too not appear in the wound therefore the fruit pulp may have some larvicidal property as well.

Thus long and short of the experiment depicts that the fruit pulp of *Solanum virginianum* L. has strong antiseptic and larvicidal property, which needs further phytochemical and pharmacological screening for the final tapping of drugs.

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