

**TREATMENT OF ALLERGIC RHINITIS
WITH THE USE OF NIGELLA SATIVA
SEEDS**

Thesis
Submitted for Partial Fulfilment
of M.Sc. Degree in Ear, Nose & Throat

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(M. B. B. Ch)

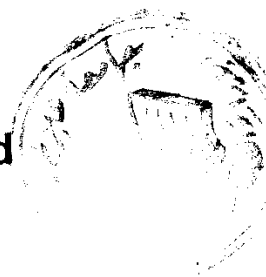
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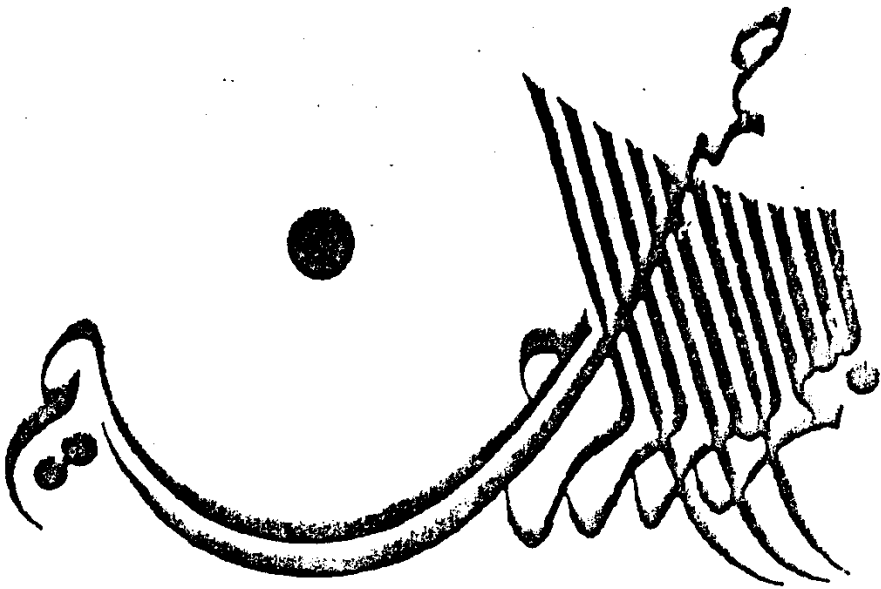
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قَالُوا

سُبْحَانَ اللَّهِ عَمَّا يُشْرِكُونَ
لَا إِلَهَ إِلَّا اللَّهُ الْعَلِيمُ الْحَكِيمُ

سُبْحَانَكَ اللَّهُمَّ
(٢٤ / البقرة)



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Introduction

Introduction

In 1819 **Jon Bostock** described a recurrent seasonal syndrome of summer catarrh consisting of excessive sneezing, nasal congestion accompanied by watery discharge, ocular itching and tearing. After 9 year's of work in 1827 he associated these symptoms with the presence of hay and coined the term hay fever. Three year's later in 1830 Elliotson reported that the grass pollen's were the causative agent in hay fever and in 1873 Blackely produced symptoms of hay fever when he placed grass pollen's granules on his skin. In 1911 Noon, started relieving symptom of hay fever through desensitization effected by giving subcutaneous injections of the pollen's extract (**Dolawitz, 1980**).

After that the concept of allergy as one of the underlying causes of hay fever started to be accepted although the term allergy was coined before this date at 1906 by Von Pirquet to denote altered immunologic response to foreign protein (**Dolawitz 1980**).

Allergic rhinitis remains a common cause of morbidity, social embarrassment and impaired performance either at school or in work place. The disease is extremely common although prevalence depends critically upon the age, and geographical location of the population studied and more important is the criteria for definition of allergic rhinitis. Estimated prevalence vary from 10% to 20% with

Aim of work

..... *Aim of the Work*

Aim of Work

To test the effectiveness of Nigella Sativa seeds, (in capsule form) in controlling symptoms of allergic rhinitis.

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Review of Literature

Nigella Sativa

Nigella Sativa of the family Ranunculaceae, is an herbaceous plant growing in countries bordering the Mediterranean Sea. It is one of the native plants in Egypt.

The plant has several names including black seed, fennel flower, love in mist, Habat El Baraka, black cammon, nutmeg of flower's, black caraway and shuniz (*Bedevian, 1936*) the name for the genus *Nigella* was derived from the old latin word *nigellus* meaning black which refer to the black colour of the seed (*El-Kadi and Kandil, 1987 & Ashour, 1988*).

Nigella has been used in many middle East and Far East communities as a natural remedy for over 2000 year's and it was even mentioned by the ancient Egyptians 2000 - 3000 years BC (*Nassimy, 1984*).

Mohammed the Prophet prayer and peace be upon him has said in correct Hadeeth (in the black seed, there is cure for every illness except death) (*Al Bukhari, 1976*). So it is used in traditional medicine in many diseases and the Arabian authors as *Ibn El-Bitar 646H and Ibn Sina 428H and Al Antaki 1094H* has mentioned that seed's are useful mainly in headache, respiratory infection, asthma and expelling the calculus of the bladder and kidney, as lactagogue and diuretic, gargle for toothache, as external application in eruptions of skin, and as vermifugal against intestinal helmentics.

Chemical study of Nigella Sativa:

Nigella Sativa contain many chemical compounds, and chemical studies of the plant revealed the presence of the following constituents: oils, saponin, alkaloids, enzymes, sterols, amino acids, coumarins, insecticides, ascorbic acid.

Oils

Nigella Sativa contain 2 types of oils, the fixed and the volatile oil.

Fixed Oil:

Crossly and le Suer (1898) prepared the oil from the Seeds by expression. They reported that oil served for edible and medicinal purposes. *Bures and Madkova (1930)* found that saturated fatty acids in the oil were composed mainly of myristic acid and the unsaturated fatty acids composed mainly of telfairic acid.

Tiwari and Karter (1943) noticed that the saturated fatty acids were composed of myristic, palmitic, stearic acid and arachidonic acid and the unsaturated acid were shown to be composed of 44.74% linoleic acid and 55.26% oleic acid.

Volatile oil:

Mahfouz and El Dakhakhny (1960) extracted crushed seeds in soxhet apparatus with pet-ether (40-60°C) where a yield of 33% oily residue was obtained, when the oily residue obtained was steam distilled it gave 1.4% volatile product which was subjected to histamine test in