## A study of the relationship between the natural history of the Solanaceae species and the general and mental symptomatology of the Solanaceae remedies utilised in homoeopathy.

By Bryan Henry Long

Dissertation submitted in partial compliance with the requirements for the Master's Degree in Technology: Homoeopathy in the Faculty of Health Sciences at the Durban University of Technology.

I, Bryan Henry Long, do hereby declare that this dissertation represents my own work in concept and execution.

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Approved for final submission

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Signature of supervisor Dr I Botha D.Tech:Hom(DUT) -----

Date of signature

## DEDICATION

This dissertation is dedicated firstly to my late grandparents, Christian and Rosemary de Beer, who's unconditional love and endless moral support throughout my life I will treasure forever.

Secondly I dedicate this dissertation to my parents Desmond and Rozanne Long who have very happily given me the moral and financial support needed so that I may have the opportunity to complete these seemingly endless years of study. I love you all very much.

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#### ABSTRACT

#### Introduction

Until recently, various attempts have been made to simplify the prescription process in homoeopathic prescribing. The doctrine of signatures, miasmatic theory, the homoeopathic repertory and more recently, kingdom analysis by authors such as Sankaran (1994) and Scholten (1993) are some of the attempts that have been made to understand the *materia medica*. With the *materia medica* constantly expanding and considering that plants make up a significant percentage of the *materia medica* (Kayne, 2006), it is evident that new systems of homoeopathic prescribing are continually needed to help practitioners both study the remedies and prescribe more accurately.

#### Aim

The Solanaceae plant family are an important and well utilised plant family in homoeopathy (Vermeulen, 2004). Considering this, it was felt that a study investigating the relationship of the natural history of the family to its general and mental symptoms be conducted in order to apply a previously unexplored research paradigm in order to create a greater understanding of *Solanaceae* remedies utilised in homoeopathy. The study conducted was a non empirical correlation study of the *Solanaceae* plant family's natural history and general and mental symptoms manifested in *Solanaceae* remedies utilised in homoeopathy. The study conducted was a non empirical correlation study of the *Solanaceae* plant family's natural history and general and mental symptoms manifested in *Solanaceae* remedies utilised in homoeopathy. The aims of the study were to establish if commonalties existed between general and mental symptoms of individual remedies belonging the *Solanaceae* family and their natural histories, as well as to establish if collective commonalities and correlations existed between the general and mental symptoms and the natural history of the *Solanaceae* family as a whole.

#### Methodology

The homoeopathic remedies obtained from the *Solanaceae* family of plants for the study were analysed in terms of rubric representation (size) using homoeopathic software packages, Radar 10.4 (Archibel, 2009b) and

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*Encyclopedia Homoeopathica* (Archibel, 2009a) a sample selection was chosen. This selection was analysed in terms of general and mental rubrics. Qualitative thematic analysis was used to establish commonalities in keyword concepts between the respective natural histories of the studied family and their respective general and mental symptoms. Keywords obtained from data tables which included criteria such as habitat and distribution, plant description, active principles (primary alkaloids), uses, physiological action if ingested, historical significance, mythology and toxicology were subjected to thesaurus consultation and tabulated in an attempt to identify synonyms relating to the general and mental symptoms of individual remedies of the sample group in the study. This facilitated in the grouping of similar themes. Once commonalities pertaining to each individual species and remedy was further tabulated and discussed in terms of keywords relating to their natural histories, a collective analysis of common correlations between the plant family as a whole was performed.

#### Results

Common themes related to general and mental symptoms and to the natural histories of species in the study included "aggression" found in *Atropa belladonna*, "depression" found in *Solanum dulcamara*, "anxiety" found in *Datura stramonium*, "confusion" found in *Hyoscyamus niger*, "burns" found in *Capsicum annuum*, " convulsions" found in *Nicotiana tabacum*, " hallucinations" found in *Mandragora officinarum* and "delirium" found in *Solanum nigrum*. Common themes relating to general and mental symptoms and the natural history of the *Solanaceae* plant family as a whole included convulsions, hallucinations, confusion and anxiety. These themes were further compared to themes exhibited in *Solanaceae* studies conducted by Mangialavori (2007) and Sankaran (2002).

#### Conclusion

The results of the study were found to support the aims of the study as outlined in the study, and the researcher believes that the outcome accurately reflects the

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relationship of general and mental symptoms to the natural history of *Solanaceae* remedies utilised in homoeopathy.

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## **CHAPTER 1: INTRODUCTION**

Faced with the enormous amount of homoeopathic remedies comprising the homoeopathic *materia medica*, practitioners have identified the need to simplify the process of remedy selection in order to facilitate the prescription process in homoeopathic practice. The use of the doctrine of signatures, miasmatic theory and the repertory are some of the useful attempts to assist the process of remedy selection for the individual patient (Gaier, 1991). More recent advancements in the remedy selection process, such as the group analysis method of remedy selection proposed by authors such as Sankaran (2002) and Scholten (1993), have been applied to the remedy selection process with obvious success. Allied to these methods is the recent emergence of software based repertories and encyclopaedia which, together with computer based search engines, have made it possible to analyse collected observations of commonalties found in remedy groups (Wulfsohn, 2005).

Approximately 65 per cent of all homoeopathic remedies are prepared from plant materials (Kayne, 2006: 83). It is therefore inferred that the plant kingdom forms a major part of the homoeopathic *materia medica*. As a result, a need has arisen to systematise the process of remedy selection of remedies belonging to the plant kingdom. Plant kingdom analyses, by authors such as Sankaran (2002), have contributed significantly to the study of the various botanical families of plants and have added to the homoeopathic understanding of this vast kingdom. Nevertheless, in an attempt to classify our observation of plant families more accurately, new methodologies of systemisation to aid the homoeopathic understanding of plant families are needed.

The Solanaceae plant family represented in homoeopathic literature is a relatively large group and of immense economic importance worldwide (Vermeulen, 2004). Considering this, it is surprising that a deeper understanding

as far as its general and mental symptomology and its natural history are concerned has not been carried out. The objective of this study is to apply a new methodology of remedy analysis in order to create a deeper understanding of *Solanaceae* remedies utilised in homoeopathy. By applying this new methodology the study hopes to pave the way forward for similar studies into other families belonging to the plant kingdom utilised homoeopathically as remedies as well as enquiries into animal kingdom families.

The aim of the study is as follows:

- a) To establish whether a relationship exists between the general and mental symptoms of remedies belonging to the *Solanaceae* family of plants and their respective natural histories.
- b) To establish whether the natural history of the Solanaceae species utilised in homoeopathy can be related to general and mental symptomology represented in current *materia medica* and repertory.

It is hypothesised that :

- a) Commonalities exist between the general and mental symptoms of individual remedies belonging to the Solanaceae family and their natural histories.
- b) Collective commonalities and correlations exist
   between the general and mental symptoms of the
   Solanaceae family and its natural history as a whole.

**Delimitations:** 

- a) This study excluded any rubrics not found within the mentals and generals repertory chapters.
- b) Only the rubrics represented in the Radar 10.4 (Archibel, 2009b) software package were included.

#### Assumptions:

a) Rubrics representing remedies in the study were generated through homoeopathic provings and validated.

As a result, the study hopes to illuminate the *Solanaceae* family in terms of known general and mental symtomology by proposing broader concepts and themes synonymous with the natural history of the family, thus enabling an increased understanding of *Solanaceae* remedies utilised in homoeopathy.

## **CHAPTER 2: REVIEW OF RELATED LITERATURE**

#### 2.1) Introduction

Plants have long served as the major source of medicinal compounds. The earliest writings from ancient Babylonia, Egypt, China and India include references to healing herbs, indicating a prehistoric origin for the use of plants as medicines. The impact of plant-derived medicine on human history has been remarkable and serves as the foundations of future human medicine (Sumner, 2000).

The desire to summarise information for future generations and to present the writings of classical scholars to a wider audience was the major stimulus for writing about medicinal plants (Barnes, Gibbons, Heinrich and Williamson, 2006). Early knowledge of plant medicines was no doubt extensive and formed part of an oral tradition passed from healer to healer through generations in prehistory. The traditional knowledge of plant medicines was no doubt accurate and acquired through careful observation and experimentation (Sumner, 2000: 16). Many cultures have left records of the medicinal use of plants which reveals that humankind has turned to the natural world for medicine since prehistoric times. In Africa, the prescribing of indigenous medicinal plant cures has been influenced by both the spiritual and physical worlds, gaining wisdom and insights from ancestral guides, which for decades dealt with their patients physiological and psychological woes (Dugmore and van Wyk, 2008). Plants such as cannabis and deadly nightshade are listed in ancient texts for their utilisation as medicines. No doubt, the medicinal use of herbs and plants began with trial and error, but some proved effective and were added to the medicine chest, where they have stayed for millennia. Many modern medicines are based on these ancient folk remedies (Rooney, 2009: 110). Pioneers in the study of plants, such as Paracelsus, Dioscorides and Socrates paved the way forward and contributed enormously to the understanding, nomenclature, uses and medicinal understanding of plants (Wink and van Wyk, 2008). Through this knowledge and

observation the natural history of plants has emerged and includes the origin, history, chemistry, pharmacology, toxicology, mythology and use of plants (Sumner, 2000). From the natural history of plants a relatively new discipline known as ethnobotany has arisen. Ethnobotany is the scientific study of the relationships that exist between people and plants and includes the uses, symbolism, ritualistic and other aspects of the practical everyday interrelationships of plants (Schultes and von Reis, 1997).

The Solanaceae plant family is of enormous economic importance and is a significantly important plant family utilised in homoeopathy (Vermeulen, 2004). The plant family is of great value homoeopathically due to various species belonging to the group being utilised routinely in practice, for example *Atropa belladonna* used for fever (Griffith, 2010: 35). Plants belonging to this family seem to share a great abundance of natural history and it is therefore felt appropriate that a relational study on the natural history of the family be done to explore the plant's natural history in comparison to the various general and mental symptoms evident in the homoeopathic *materia medica*.

#### 2.2) The doctrine of signatures

The doctrine of signatures is defined as a 'morphological relationship between the drug substance and the organ or affinity in question' and was another endeavour to make sense of the large and constantly growing *materia medica* (Gaier, 1991). The origin of the doctrine of signatures stems back to the medieval times when it was utilized to help in the recognition of medicinal plants. The Chinese were the first to conceive that the medicinal use of a plant could be detected through "signatures", clues revealed by the plant shape, taste, texture, and colour. If a plant resembled a particular body part, such as the liver or heart, its physical form was regarded as a suggestion for its possible use (Sumner, 2000: 23). It was first utilised in western medicine by the Swiss physician, Paracelsus (1493-1541) (Norland, 2003: 3).

According to Wood (1997), the doctrine of signatures operates through at least two different subjective faculties, the intuition and the imagination. An example of the intuitive approach to understanding a plant can be found in looking at *Angelica archangelica. Angelica archangelica* grows in damp, shady soil, but has warming, drying properties which help it remove damp and cold from the system. The environment in which it grows is a signature which makes sense to the intuition and is not too far removed from the rational approach. The second way in which the doctrine of signatures works is through the imagination, the ability to see images. *Angelica archangelica* is notable for the long hollow tube of the stalk. This pictures or resembles the tubes of the body. Hence, *Angelica archangelica* is a remedy for the bronchial tubes. It is also a signature for the blood vessels (especially as the stalks are reddish purple), is utilised in the removal of stagnant blood and while warming stimulating the circulation (Wood, 1997: 23).

The doctrine of signatures is still primarily used in herbal medicine and in anthroposophical medicine today and although condemned by Hahnemann (2003: 82) it is applied cautiously by vigilant authors such as Vermeulen (2004).

#### 2.3) Homoeopathy

Homoeopathy was founded in the late 18<sup>th</sup> century by the German physician Samuel Hahnemann (1755-1843) (Lockie, 2000: 14). It is a system of medicine that uses naturally derived medicines to stimulate the body's own healing system thereby treating the whole individual person independently from the disease. The central principle to homoeopathic practice is known as the 'law of similars' or *Similia similibis curentur* ('let likes cure likes') (Lockie, 2000: 14). In practice this means that a medicine taken by a healthy human in order to elicit symptoms is capable of curing any disease that displays similar effects (Sankaran, 1991: 1).

Medicines used in homoeopathy are derived from the animal, plant and mineral kingdoms, as well as disease products (nosodes), healthy tissues and secretions (sarcodes), synthetic and imponderable sources (Sankaran, 1991: 3). Homoeopathy utilises the 'vitalistic' energies of material substances to produce powerful medicines when 'potentised' through a process of serial dilution and sucussion. Balance is restored and health ensues when the vital force is stimulated with a medicine that produces a similar but slightly stronger effect than the true disease (Lockie, 2000: 14).

#### 2.3.1 Miasmatic theory

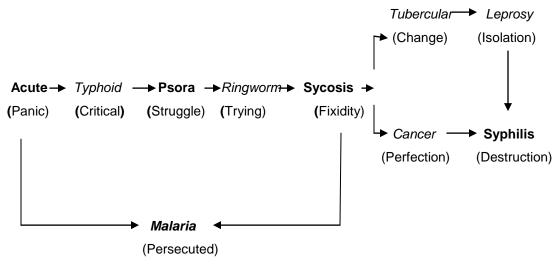
The systemisation process in homoeopathy is not a new concept. Hahnemann realised that in chronic diseases, the symptoms alone were not enough to lead to the remedy. He observed that in a certain number of his patients, whom he treated for acute conditions, returned with a new set of unconnected symptoms which he accredited to an underlying deep seated disease (Kayne, 2006: 153). This phenomenon was called a 'miasm" derived from the Greek word meaning "pollution, taint" (De Schepper, 2006: 355). This classification of remedies and the identification of specific anti- miasmatic remedies became the first classification system in homoeopathic practice. Hahnemann therefore divided disease into three main categories: those arising from suppressed scabies (psoric miasm), those arising from gonorrhoea infection (sycotic miasm) and those arising from syphilis infection (syphilitic miasm) (Sankaran, 1994: 19). Hahnemann initially classified 84 remedies into these miasmatic groups (Gaier, 1991).

The theory of chronic diseases and their miasmatic classification caused much resistance amongst Hahnemann's colleagues, but in due course was accepted. It however remained the source of controversy for a long time. After Hahnemann, Burnett later defined the tubercular miasm (a combination of the psoric and syphilitic miasms) followed by Foubister and Templeton who defined the cancer

miasm (based on a combination of at least two, often three or even all four of all the other miasms)(De Schepper, 2006).

Sankaran (1997: 217) further contributed to miasmatic theory by focusing more deeply on responses and reactions evoked by specific groups of remedies. He therefore broadened and added to the understanding of miasmatic theory by adding the so called "in-between miasms". This was an endeavour to make the process of defining miasmatic activity in patients more accurate. These new additions to miasmatic theory are named after the diseases they most closely represent in action and pace, and are known as the acute, typhoid, ringworm, malarial and leprous miasms. These five miasms together with the cancer and tubercular miasms provided a new valuable map to study disease (Sankaran, 1994: 3). This new approach to miasmatic theory by Sankaran has been termed the extended miasmatic model and is illustrated in figure 1 (Sankaran, 1997: 218).

# Figure 1: A diagrammatic representation of Sankaran's extended miasmatic model (Sankaran, 2000: 450).



Key: Name in **bold** indicates a main miasm

Name in *italics* indicates an in-between miasm

Name in brackets indicates the action of the miasm

Although additions such as the extended miasmatic model explained above have contributed significantly to the understanding of miasms, there is still much debate amongst homoeopaths about whether miasms exist. What is certain, however is that an understanding of the original three miasms proposed by Hahnemann lays the ground work for an understanding of additional miasms proposed by later homoeopaths (Norland, 2003: 21). Controversy over the homoeopathic classification of disease still remains one of the greatest barriers limiting dialogue between orthodox and homoeopathic medicine today (Kayne, 2006: 153).

#### 2.3.2) The homoeopathic repertory and homoeopathic software

According to the *Churchill Livingstone International Dictionary of Homeopathy* (2000) the homoeopathic repertory is defined as a systemic cross reference of symptoms and disorders to the homoeopathic medicines in whose therapeutic repertoire (*materia medica*) they occur. The strength or degree of the association between the two is indicated by the type in which the medicine name is printed, for example bold indicating a strong symptom and plain type a more common one (Swayne, 2000: 183).

Since its inception in 1832, the homoeopathic repertory has been the most useful and longest serving method of systemisation (Gaier, HC, 1991). Homoeopathic repertories have been a natural outgrowth of the *materia medica* and were developed to organise the vast amount of information from an enormous and ever growing *materia medica*. Practitioners keep approximately 20 to 30 remedies in their memory and can often prescribe a polycrest (or a homoeopathic medicine of many uses) quickly using a simple drug picture. In order to seek a match between patients symptoms and the corresponding drug picture it is often necessary to make use of a repertory. In a repertory the remedies drug picture is classified with references to symptoms in contrast to a

*materia medica* that lists symptoms by remedy in alphabetical order (Kayne, 2006: 192).

Hahnemann himself took some of the first steps in structuring his information into some kind of repertory by appending an alphabetical index to his Fragmenta of 1805, and undertaking two further compilations which were never published. It was however Hahnemann's immediate follower and colleague von Boenninghausen who can be credited with creating the first usable repertory in 1832 (Schroyens, 2004: 1). Boenninghausen's first published repertory, The systemic Alphabetic Repertory Of Homoeopathic Medicine, consisted of two parts; anti-psoric and non anti-psoric remedies. It was later combined to form the First Homoeopathic Repertory and has become the model of our modern repertories, inspiring authors such as Jahr, Handbach, Lippe, Lee and Kent to produce various forms of repertories. These repertories include Boericke's repertory, Kent's repertory and more recently the *Repertorium Homoeopathicum Syntheticum,* or Synthesis, by Schroyens (2004). Synthesis 9.1 boasts the most complete and up to date information and includes contributions from both classic authors such as Allen, Boenninghausen, Hering and Kent, as well as modern authors such as Morrison, Master and Tyler. Many new and up to date provings have also been integrated therefore creating a tool whereby the homoeopath can define the information needed with confidence and accuracy (Schroyens 2004).

In an ever growing technological era, homoeopathic software packages have emerged allowing homoeopaths to search several repertories with one keystroke, therefore extending the scope for remedy selection and facilitating the remedy selection process (Kayne, 2006: 197). Software packages such as Radar 10.4 and *Encyclopaedia Homeopathica* have enabled practitioners to arrive at a prescription with accuracy and comparatively extract symptoms of remedies efficiently and effectively with rapidity and accuracy. Radar 10.4 enables the practitioner to find appropriate symptoms for each case via the

world's most popular repertories, and incorporates approaches to case analysis and remedy studies utilised by world renowned homoeopaths (Archibel, 2009b).

*Encyclopaedia Homoeopathica* is a homoeopathic *materia medica* package that contains thousands of pages of *materia medica*'s, homoeopathic journals and vast amount of homoeopathic literature. Literature ranges from classical authors such as Kent, Allen and Herring as well as the most recent works from authors such as Vitoulkas, Shore and Sankaran (Archibel, 2009a).

Through this technological advancement, both the student and practitioner can rapidly access a vast amount of homoeopathic literature available for more precise prescribing, studying and research purposes (Archibel, 2009a).

### 2.3.3) Kingdom analysis

Mother Nature offers a most wonderful system of natural classification: the mineral, plant and animal (Little, 2007). The mineral, plant and animal kingdoms are the three fundamental families of nature and the homoeopathic *materia medica*. Considering this and the vast amount of remedies belonging to these kingdoms pioneering authors such as Scholten (1993) and Sankaran (1994) have classified remedies belonging to the various kingdoms using the group analysis approach. The utilization of medicines derived from these three kingdoms is not limited to homoeopathy but is also utilised in other alternative medical systems such as anthroposophical medicine.

By focusing on the mineral kingdom Scholten (1993) noticed trends within the periodic table of elements. Analysing groups of the periodic table of elements used in homoeopathy such as the Carbonicums and the Sulpuricums, Scholten extracted what is common to each group. By extracting what is common from each group Scholten defined common themes that can be applied to each group as a whole. He went on further and incorporated the various themes of individual elements according to the salts they produced in combination. Scholten further proposed that each row (series) corresponds to a general theme and that each

column (group) from left to right defined the degree or development of the particular theme of the series in question. By taking a theme of a particular row and combining it with the theme of a particular stage in the column, an individual is able to create an overall theme that is unique for that element. In his later publication, *Minerals in Plants,* Scholten (2001) compared the medicinal properties of plants and minerals. By analysing the minerals in plants, Scholten (2001) compared the medicinal properties and the homoeopathic pictures of minerals present in high concentrations in a plant with the properties and pictures of that plant. This enabled an individual to compare the use of plant remedies with that of minerals, therefore contributing significantly to the prescription process in homoeopathic practice.

By identifying the main differentiating features of each kingdom Sankaran (1994: 256) classified patients' disease symptoms as belonging to one of the three kingdoms (i.e. the plant kingdom, the animal kingdom and the mineral kingdom). This was derived from an analysis aimed at ascertaining whether there existed a specific pattern of behaviour typical to remedies of the same kingdom (Sankaran, 2000: 5). These features are summarised in table 1.

	PLANT	ANIMAL	MINERAL
KEY WORD	Sensitivity	Competition	Structure
	Sensitivity	Problems in	
NATURE OF COMPLAINT	,	attractiveness and	Problems in structure
		competitiveness	
		Loss in attractiveness	
		Competition	Break of structure
FEARS	Hurt/Pain	Aggression	Failing in performance
		Rejection	Of losing something
		Isolation	
NATURE/DISPOSITION	Softness	Affectionate	Systematic

Sensitive	Aggressive	Strong
Emotional	Alert/Quick to react	Calculative
Adjusting	Jealous	
Influenced easily	Malicious	
Adaptable	Attention seeking	
Irritable		

When studying the plant kingdom Sankaran noticed that plants exhibit a 'sensitive' nature indicated by the fact that they are affected by changes in the external environment and are capable of adapting to these changes. The complaints are usually of rapid onset and changeable with modalities. They are sensitive, docile, emotional people and fear hurt and pain. They are disorganized in contrast to the mineral kingdom where organization is a central theme (Sankaran, 1994: 256).

The theme central to the animal kingdom is 'competition'. They are extremely jealous of any competitor and react instinctively to achieve their desires. They are attention seeking in behaviour and can be quite malicious. In the animal remedies, two distinct entities co-exist in the same being and this 'split' is characterized by an animal side exhibiting instinct and a human side exhibiting guilt or restraint. Due to this 'split' they can be affectionate, warm, caring, playful, faithful and communicative on the one side. On the other hand they are jealous, aggressive and deceitful. The animal kingdom exhibits fears such as attractiveness, competition, aggression, attack, rejection and isolation. The complaints are of moderate onset and are not as slow as the minerals and not as rapid as in the plants (Sankaran, 1994: 257).

Common to the mineral kingdom is 'structure' and 'organisation'. These patients present their complaints in a systematic order and these complaints generally of a slow progressive nature. They are well-organized individuals and are often high performers and work in a steady, reliable manner. Their fears are mostly centred on breaking of relationships and losing what they possess or have built

up (i.e. their structure). Due to their nature, they find it difficult to make human contact (Sankaran, 1994: 259).

Although Sankaran found this approach or classification had made it possible to identify a particular kingdom from which to select a remedy from according to a case presentation, he still found this method too broad and furthermore subdivided each kingdom into subkingdoms. Animal kingdom classification was based on classes such as snakes, spiders, and various mammals making up the kingdom whereas the plant kingdom was based on botanical families.

Each of Sankaran's Kingdom themes resonates with anthroposophical medicine. Anthroposophical medicine is defined as the medicine of the knowledge of man. It is a philosophy and system of medicine based upon the insights and teachings of Rudolf Steiner with the assistance of Doctor Ita Wegman, relating to the spiritual nature of human existence. It is a therapeutic method which includes the use of some medicines derived from the homoeopathic materia medica, not prescribed according to the *similia* principle, but using 'spiritual science', the doctrine of signatures and metaphysics. Preparation of the medicine does involve dilution with rhythmic agitation, but not the same process of succussion used in homoeopathic pharmacy to achieve potentisation (Swayne, 2000: 12). The anthroposophic picture of man as a fourfold organism is essentially a practical, working picture that is widely used in anthroposophical medicine. According to anthroposophical medicine the use of this model ensures that the whole person is involved in the healing process. A basic premise is that we have a shared evolution with the three kingdoms of nature and therefore have a direct relationship with them. In addition man has a fourth higher member of his being which places him in a kingdom of his own.

According to Bott (2004) the fourfold man according to anthroposophical medicine can be explained as follows:

- Man has a *physical body* for which the laws of chemistry and physics are appropriate as for any other lifeless object from the mineral kingdom. This physical body thus lends structure.
- This physical body would actually disintegrate if an organisation of opposing forces did not keep it together. Anthroposophical medicine calls this organisation of formative forces the *life-body, or etheric body*. We find the physical body and the life-body solely together in living nature in the plant kingdom. They sustain life in all its forms, including processes of growth, reproduction and repair. The etheric body reacts to external forces, rendering it sensitive to its environment.
- Animals, like man, have feelings, urges, desires, experiences all of which are lacking in plants. The organ that makes this *consciousness* possible is, like the life-body, super sensible, that is we can only see its manifestation, not its innate being. This living organisation we call the *feeling-body* - Anthroposophy talks of the soul-body or astral-body. These urges are instinctive, driven by survival, thus encompassing competitive, aggressive behaviour to ensure attractiveness.
- The human being with his *self-consciousness* goes beyond the animal. He can think, he can imagine, can voluntarily remember, act freely, can be creatively active, etc. Through the little word 'I' man distinguishes himself from animals. The human being has an *Ego* as the fourth, super sensible member of his being. Anthroposophical medicine thus identifies a fourth "kingdom", where the human transcends the other three kingdoms.

Therefore according to anthroposophical medicine man is seen as one visible and three super sensible bodies and as a citizen of four realms that is the realms of spirit, soul, life and physical/material. The super sensible bodies closely penetrate the processes and organs of the physical body during life. Moreover, because these four members of man's being are especially related to the four traditional elements, respectively to Earth, Water, Air and Fire, they influence the balance between these bodies through the balance of the four elements interweaving in the physical body (Bott, 2004). A summary of the main features of each "kingdom" can be seen in table 2.

		KINGDOM	HUMAN	07475	NATURAL
REALM	QUALITY	OF NATURE	ELEMENT	STATE	ELEMENT
SPIRIT	Self- consciousness	Human	Ego	Warmth	Fire
SOUL	Consciousness	Animal	Astral Body	Gas	Air
LIFE	Life	Plant	Etheric Body	Liquid	Water
MATERIAL	Weighable and measurable	Mineral	Physical Body	Solid	Earth

Table:2 Summary of fourfold human being according to anthroposophicalmedicine (Bott, 2004).

It is evident that the Kingdom analysis of homoeopathic remedies has made an invaluable and significant contribution to the understanding of the vast amount remedies in the homoeopathic materia medica and has therefore contributed significantly to the systemisation process in homoeopathy. It is also apparent that the use of kingdom classification is not entirely limited to homoeopathy alone but is well utilised in other forms of medicine.

### 2.4) Kingdom Plantae

Plants are multi cellular eukaryotes with well-developed tissues and live in a wide diversity of terrestrial environments: from lush forest to dry desert or frozen tundra. Plants are adapted to living on land and have features that allow them to live and reproduce on land. Like green algae, plants contain chlorophylls a and b and carotenoids (Mader, 1998: 554).

Plants are distinguished from animals by a number of factors. Most plants are autotrophic, making their food from organic starting materials by photosynthesis. Animals by contrast are heterotrophic. Plants can generally respond to external

stimuli by growth movements. Most plant cells are surrounded by a cellulose cell wall and starch is a common storage carbohydrate. Animals do not have cell walls and carbohydrates are stored as glycogen. Perennial plants tend to grow indefinitely whereas an animal's increase in size ceases at maturity (Baily, 2006: 361).

#### 2.4.1) The Solanaceae

The Solanaceae are a large family of dicotyledonous plants commonly referred to as the nightshade or potato family. It contains about 94 genera and around 3000 species. Its distribution throughout the world is widespread with concentrations of genera in Central and South America (Baily, 2006: 428). Many members of the Solanaceae plant family such as *Cestrum aurantiacum*, *Datura ferox*, *Datura stramonium*, *Nicandra physalodes*, *Nicotiana glauca*, *Solanum mauritianum* and *Solanum nigrum* are classified as weeds worldwide due to their exotic origins, abundance and their adaptability to withstand unfavourable conditions, therefore invading a wide range of ecological environments (Bromilow, 2010). Not only is the family of significant importance as a foodstuff but it is an important source of medicines and narcotics (Vermeulen, 2004: 221). The Solanaceae are an interesting plant family to study in that some of them are very well known in traditional medicines, and are also well known from a magical point of view as well as an anthropological view (Mangialavori, 2007: 3).

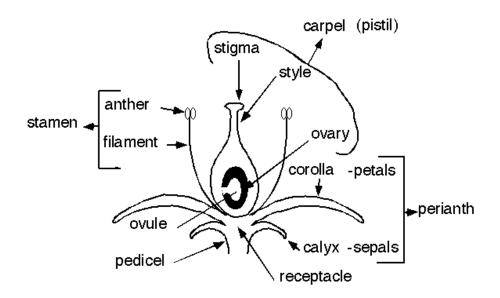
From a historical perspective the *Solanaceae* family is a plant family surrounded by myth, fear and awe. Well known species belonging to the family such as *Atropa belladonna* and *Mandragora officinarum* have been well documented throughout history. The *Atropa belladonna* plant was well known to the Ancient Greeks for the drug (or potion) that the sorceress Circe administered to the sailors on Odysseus' ship, which subsequently drove them mad and turned them into 'swine'. The Greeks also realised the plant was extremely poisonous and they therefore identified it with one of the three Fates. Clotho spins the thread of

human life; Lachesis measures it off and Atropa (the Inflexible) severs it. In medieval times it was widely used by witches in their pharmacopeia. *Atropa belladonna was* preeminent as it was regarded as one of the devils favourite plants. It was believed that the devil sprinkled the plant with his own blood every night and regularly took cuttings for his malign purposes. Witches and wizards were said to have recognized that the plant had found favour in the eyes of the devil, thus using it as a constituent in their flying ointments (Lee, 2007).

*Mandragora officinarum* was well known to the ancient Greeks, Romans, Arabs and Hebrews as having magical powers and being possessed by a satanic spirit. According to the ancient "doctrine of signatures" the Mandrake root resembled the human body and was thus seen as a cure for a wide variety of ailments of the human body (Lee, 2006). The Hebrews believed the plant aided procreation of the offspring. The Greeks also noted it for its narcotic power and its use as a love potion and fertility drug. The Romans utilised the plant for medicinal and military purposes. The Roman general Hannibal left several jars of wine fortified with mandrake on the battlefield for African rebels who became sleepy and therefore could be easily defeated (Lee, 2006). Other well-known species belonging to the family such as *Capsicum annuum*, *Datura stramonium*, *Hyoscyamus niger*, *Nicotiana Tabacum*, *Solanum dulcamara* and *Solanum nigrum* have been well documented throughout history for their wide variety of utilization in folklore, medicine and magic.

Many of the plants belonging to the *Solanaceae* family are poisonous due to their possession of alkaloids, for example atropine found in *Atropa belladonna* and nicotine found in *Nicotiana tabacum*. Others are important food plants such as *Solanum tuberosum* and *Lycopersicon esculentum*. Included in the family are the aubergines and various capsicums belonging to the family and the genus Nicotiana which includes the important cash crop, tobacco (Baily, 2006: 429).

The majority of *Solanaceae* are herbaceous. The leaves lack stipules and the flowers illustrated in figure 2, are usually regular and borne in a cyme. Most commonly, there are five sepals and petals, more or less fused, and five anthers. The fruit is usually a berry, though sometimes a capsule, as in *Hyoscyamus niger* and *Datura stramonium* (Baily, 2006: 428).



# Figure 2: Diagrammatic representation of typical flowering Plant (Baily, 2006)

Typical to the family are its chemical composition of alkaloids (Figure 3) especially of the tropane, nicotine and steroidal type. Tropane alkaloids which are particularly well known to occur in members of the *Solanaceae* family have been known for centuries as poisonous substances. The tropane alkaloids hyoscyamine and atropine have an effect on the autonomic nervous system by increasing the heart rate, decreasing intestinal tone and peristalsis and decreasing secretions such as saliva, gastric secretions and secretions from the eye. Homoeopathic symptoms related to the effects of atropine are **CHEST**-PALPITATION, **MOUTH**-SALIVA-scanty and **EYE**-DRYNESS (Schroyens 2004).

Scopalamine found in high quantities in species such as *Datura stramonium*, is another tropane alkaloid leading to raving manifestations of delirium and can be related to the homoeopathic symptom **MIND**-DILIRIUM (Schroyens 2004).

Nicotine a pyridine alkaloid derived from the amino acid lysine is absorbed through the mucous membranes of the nose, mouth and lungs. Nicotine acts on the central nervous system, smooth muscle of the intestine and cardiovascular system through vasoconstriction thus increasing blood pressure (van Wyk, van Oudtshoorn and van Heerden, 2005: 22). The homoeopathic symptom **GENERALS**-HYPERTENSION relates to the effect of nicotine (Schroyens 2004).

The steroidal alkaloid solanine is present in very small quantities in members of the *Solanaceae*. The symptoms of intoxication with solanine are irritation of the throat, headache, fatigue, diarrhoea, coma and convulsions (van Wyk et al., 2005: 22). The following homoeopathic symptoms relate to the intoxication of solanine, **THROAT**-IRRITATION, **HEAD**- PAIN, **GENERALS**-WEAKNESS, **RECTUM**- DIARRHEA, **MIND**-COMA and **GENERALS**-CONVULSIONS (Schroyens 2004).

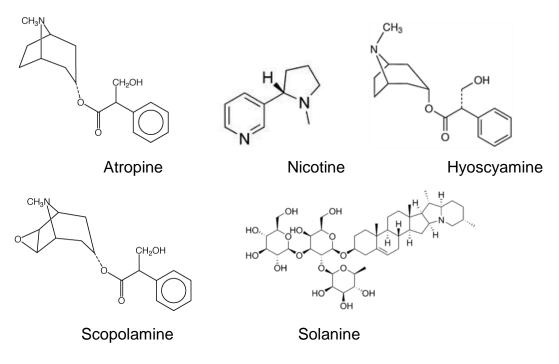
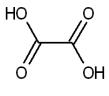


Figure 3: Chemical structures of common alkaloids present in Solanaceae species (van Wyk et al., 2005).

Many taxa are categorized by oxalic acid (Figure 4) which often forms typical structures (Barnes et al., 2006: 43). Oxalic acid is an organic acid with the formula (COOH)<sub>2</sub> which assists in the removal of excessive amounts of various cations for example calcium, sodium and potassium, by forming respective oxalates, and is highly toxic (Baily, 2006: 330).



Oxalic acid

#### Figure 4: Oxalic acid chemical structure (van Wyk et al., 2005)

#### 2.4.2) Solanaceae studies in homoeopathy

In an endeavour to understand homoeopathic remedies derived from the plant kingdom more comprehensively, Sankaran (2002) studied plants according to the botanical family using his group analysis method. By extracting so-called "sensations", Sankaran was able to link species belonging to the *Solanaceae* plant family via their common symtomology and in so doing was able to categorise them according to his extended miasmatic classification. Sankaran therefore convincingly demonstrated that the botanical classification of plants had relevance for homoeopaths (Schiller, 2005).

Vermeulen (2004) studied similars and parallels between substance and remedies. In studying, various remedies belonging to the *Solanaceae* family

such as Atropa belladonna, Capsicum annuum, Datura stramonium, Hyoscymus niger, Mandragora officinarum and Solanum dulcamara, he highlighted notable parallels between the substance and the homoeopathic drug pictures as far as their taxonomical classification, habitat, chemical constituency, uses, toxicology, physiological action and mythology was concerned.

In his publication Solanaceae, Nightmare between Light and Dark Mangialavori (2007) also explored the parallels and characteristic features of a group of homoeopathic medicines with Atropa belladonna as its archetype. Not constrained by the botanical family, Mangialavori broadened the scope of Solanaceae remedies by comparing fundamental themes of medicines such as Lyssinum, Gallicum acidum and Tanacetum to those of Solanaceae remedies. Furthermore themes and concepts of remedies belonging to the group, such as Atropa belladonna, Mandragora officinarum, Solanum nigrum, Datura stramonium, Hyoscyamus niger, Capsicum annuum, Solanum dulcamara and *Nicotiana tabacum* were highlighted. On examining the much smaller remedies of the group such as Lycopersicum esculentum and Solanum tuberosum he found that fundamental similarities in themes and concepts existed between the well-known and less well known members of the group. Therefore by scrupulous analysis of his cured cases, he compared and examined well-known remedies belonging to the Solanaceae plant family as well as the less represented remedies of the family.

Notable publications on individual remedies belonging to the *Solanaceae* family of plants have contributed significantly to the understanding of the plant family. Herscu (1996) with Cycles and segments and his experience in treating children gave an extensive exposition of the remedy *Datura stramonium*. By describing the stramonium cycle and various stages of the cycle, the symtomology pertaining to the remedy was noticeably revealed in his research. Pitt (2006) in his publication *Tobacco, An exploration of its Nature Through the Prism of homoeopathy* explored the nature of the proving substance *Nicotinia rustica*. By

exploring the history and use of tobacco, he amplified information brought up by the proving breathing new life into a somewhat expired traditional picture of the remedy.

It is obvious from current literature that many researchers have found commonalities between the *Solanaceae* remedies proven homoeopathically. However, few have gone back to correlate the provings of the remedies to the plant family's natural history. It is thus important to do so in order to establish if relationships exist between the plant family's natural history and symptoms manifested by provings of remedies derived from the family, thus contributing to the systemisation process in homoeopathy and ultimately the utilization of remedies derived from the *Solanaceae* plant family.

The following chapter will explain the approach followed in attempting this comparison.

# **CHAPTER 3: METHODOLOGY**

## 3.1) Sample selection

In order to define the sample population, the first step taken was to define the *Solanaceae* family and search for its members. This list was then refined to only include those utilized homoeopathically. The homoeopathic list was obtained using the computer software programme Radar 10.4 (Archibel, 2009b) and included 35 remedies from the *Solanaceae* family of which are presented in table 1 in chapter 4.

This list of 35 remedies was further refined to only include well proven remedies and those clinically verified. On account of the methodology particularly focusing on remedies with well-defined symptoms, smaller remedies of the group, which have less homoeopathic significance in terms of rubric representation, were excluded.

Solanum nigrum, which has a total of 424 rubrics in Radar 10.4, the last included remedy for extraction purposes, as other remedies, with less rubric representation, were felt too insignificant in terms of rubric representation and to be of less botanical historical importance to include in the study. It was also felt by the researcher that remedies such as *Mandragora officinarum* and *Solanum nigrum* although relatively poorly represented in rubric representation be included in the study due to their rich botanical history. Remedies with less than 424 rubrics were thus excluded from the comparative extraction process.

# 3.2) Data Processing

A computer repertory extraction was performed for each remedy included in the study using Radar Synthesis 10.4. Parameters were set to exclude rubrics other than general and mental symptoms as the study focused exclusively on these symptoms. In addition, literature from *Encyclopaedia Homoeopathica* (Archibel,

2009a) and various other reference sources were included to acquire in depth information on the natural history of species included in the study.

#### 3.3) Data analysis

Qualitative thematic analysis was used. This was performed by establishing commonalities in keyword concepts between the respective natural histories of the studied family and their respective general and mental symptoms. A data analysis table including components relating to each individual remedy was drawn up by the researcher in an attempt to standardise the data analysis process and can be seen in table 5 in chapter 4. The criteria for comparison identified were habitat and distribution, plant description, active principles (primary alkaloids), uses, physiological action if ingested, historical significance, associated mythology and toxicology.

Keywords obtained via the study of the respective species natural history was subject to thesaurus consultation using the *Oxford Paperback Thesaurus* (2006) and tabulated in an attempt to identify synonyms relating to the general and mental symptoms of the individual remedies involved in the study. This facilitated the grouping of similar themes. All commonalities pertaining to each individual species and remedy was further tabulated and discussed in terms of keywords pertaining to their natural histories and general and mental symptoms. Once individual remedy analysis in terms of correlation was established on each individual species a collective analysis of common correlations between the plant family as a whole was performed.

#### 3.4) Conclusion

The methodology allowed reflection on the natural history of the individual members of the Solanaceae family as well as the general and mental symptoms of remedies belonging to the *Solanaceae* family of plants. This reflection

facilitated the comparison of the natural history of the S*olanaceae* species utilised in homoeopathy and the general and mental symtomology represented in current *materia medica* and repertory, with the aim to highlight commonalities. The methodology strove to test a previously unexplored paradigm in an attempt to add to the systemisation process of remedy selection in homoeopathic practice.

#### **CHAPTER 4: RESULTS**

#### 4.1 Solanaceae in Homoeopathy

According to Radar 10.4 (Archibel, 2009b) the number of remedies in the *materia medica* belonging to the *Solanaceae* plant family number 35 and are presented in table 3 below. The table also indicates the number of mental and general rubrics as well as the total rubrics present in each of the remedies, indicating the relative homoeopathic relevance of each remedy in terms of rubric representation.

# Table 3: Solanaceae remedies used in homoeopathy and the relative homoeopathic significance in terms of number of total number of rubrics (Archibel, 2009b)

REMEDY	COMMON NAME	TOTAL RUBRICS
Atropa belladonna	Deadly nightshade	11624
Solanum dulcamara	Bittersweet	7127
Datura stramonium	Jimson weed	4937
Hyoscyamus niger	Black henbane	4820
Capsicum annuum	Chilli pepper	3767
Nicotiana tabacum	Tobacco	2360
Mandragora officinarum	Mandrake	577
Solanum nigrum	European black nightshade	424
Solanum lycopersicum	Tomato	98
Duboisia myoporoids	Corkwood	39
Fabiana imbricata	Pichi	38
Solanum mammosum	Apple of Sodom	31
Solanum tuberosum	Potato	30
Datura arborea	Tree stramonium	25
Datura metel	Downy thorn apple	21
Duboisia hopwoodi	Corkwood tree	8
Solanum arrebenta	Arrabenta	18
Solanum vesicarium	Winter cherry	15
Solanum carolinese	Carolina horse nettle	13
Solanum oleraceum	Black nightshade	13
Datura ferox	Long spined thorn apple	10
Datura sanguine	Angels trumpet	5
Solanum capense	-	3
Solanum pseudocapsicun	n Jerusalem cherry	2
Solanum sodomoeum	Sodoms apple	2
Solanum xanthocarpum	Yellow berried nightshade	2

Withania somnifera	Ashwaghanda	2
Capsicum frutescens	African birds eye	1
Solanum erythracantum	American black nightshade	1
Solanum melongena	Aubergine	1
Solanum nodiflorum	-	1
Solanum villosum	Hairy nightshade	1
Nicotiana rustica	Tobacco	0
Solanum integrifolium	Scarlet egg plant	0
Solanum malacoxylon	South American egg plant	0

The sample selection was based on the homoeopathic significance of each remedy belonging to the *Solanaceae* family as well as the number of well-defined general and mental symptoms represented by each remedy. Of the 35 *Solanaceae* remedies used in homoeopathy, the eight remedies listed in table 4 have more significance in homoeopathic literature and therefore are well proven and clinically well applied remedies. The methodology used in the study also focused on remedies with well-defined and clinically well applied symptoms as well as remedies having significant literature pertaining to their relative natural histories. The eight remedies listed in table 4 were felt to have met these criteria according to the researcher.

(Archibel, 2009b).			
REMEDY	GENERAL	MENTAL	TOTAL
	BUBBICS		DUDDICS

Table 4: Table indicating Solanaceae remedy sample group representation
in terms of general and mental rubrics and total number of rubrics
(Archibel, 2009b).

REMEDY	GENERAL	MENTAL	TOTAL
	RUBRICS	RUBRICS	RUBRICS
Atropa belladonna	1375	1574	11624
Solanum dulcamara	692	755	7127
Datura stramonium	639	1481	4937
Hyoscyamus niger	640	1183	4820
Capsicum annuum	488	305	3767
Nicotiana tabacum	269	275	2360
Mandragora officinarum	90	41	577
Solanum nigrum	38	62	424

From the table above, it is thus evident that *Atropa belladonna* is the best represented remedy from the *Solanaceae* botanical family, followed by *Solanum dulcamara*, *Datura stramonium* and *Hyoscyamus niger*. The highest utilised

remedies, however, in practice are *Atropa belladonna* and *Datura stramonium* (Mangialavori, 2007).

#### 4.2) Data analysis tables

In order to standardize the collected data, data analysis tables were drawn up which included guidelines for the collation of the information on the natural history of the remedies studied. The literature into the natural history of the *Solanaceae* family was conducted based on the guidelines of these tables and are presented in tables 5 and 6.

#### TABLE 5: DATA ANALYSIS TABLE

<u>SPECIES</u>	HABITAT AND DISTRIBUTION	DESCRIPTION	HISTORY	<u>MYTHOLOGY</u>
Atropa belladonna	Deciduous forests in Europe, Asia and the Mediterranean Region of North Africa: plants are widely cultivated (Wink and van Wyk, 2008). Found along roadsides and abandoned places as well a waste places, quarries and old ruins(Vermeulen, 2004).	A perennial herb with soft stems and bright green, simple leaves. The tubular flowers are usually yellowish brown, and are followed by attractive, shiny, big black berries, each surrounded by a persistent calyx (Wink and van Wyk, 2008).	Used by ancient Mesopotamians in treating illnesses thought to be caused by demons. Used to treat asthma, chronic coughing and spasms of the bladder. Historically important are the hallucinogenic and aphrodisiac properties of the plant (van Wyk and Wink, 2004).	Root of plant used in love magic and to bring good fortune in gaming and games of fortune. Used in Flying potions of witches. In Greek times added to wine for amnesiac rituals Berries prepared in wine to improve the aggression of certain warriors. Used by Romans to increase their ability to fight (Mangialavori, 2007). According to old legends plant believed to belong to devil that goes about trimming and tending it in his leisure and can only be diverted from it one night a year when he is preparing for the witches Sabbath. According to an old superstition it is said that the plant at certain times takes the form of an enchantress of exceeding loveliness (Grieve, 1981).
Capsicum annuum	Indigenous to Central and South America, including Mexico and the Caribbean region (van Wyk and Wink, 2004).	Capsicum annuum is an annual plant of up to 0.5 meters in height with dark green, stalked leaves, white flowers and oblong, green or red fruit (Wink and van Wyk, 2008).	Used by Mexican Indians and Szechwan Chinese in many of their meals. Used as a main ingredient of numerous spicy sauces (van Wyk 2005).	Ancient texts suggest and look upon it as a "wonder drug " suggesting that it is useful for virtually everything ,ranging from killing Harmful bacteria in

	Cultivated in tropical countries up to an altitude of 200 meters (Vermeulen, 2004).			the body to preventing infections in sores,burns and injuries and releasing lock jaw (Vermeulen, 2004).
Datura stramonium	Originally found in tropical north America distributed worldwide (Wink and van Wyk, 2008).	A robust annual up to 1,5 meters in height, with large ,unpleasantly scented leaves,large, white or purplish,tubular, erect flowers and typical thorny capsules that split open to release numerous small,kidney- shaped,black seeds (Wink and van Wyk, 2008).	Used by Aztecs and Indians as an intoxicant and hallucinogen. Plants or extracts were smoked, drunk or placed on the skin. Since the sixteenth century it has been used as an intoxicant in Europe. Extracts were also misused for infanticide, suicide and murder. The use of the plant for crime, seduction and as a narcotic drug has been documented (Wink and van Wyk, 2008). Given to men by prostitutes to remain unconscious. (Vermeulen, 2004),	Datura narcosis believed by Luisena Indians to be used in puberty rites in order to become men. Also associated with death and the forces of darkness. Gypsies of seventeenth centaury used seeds in preparation of love potions (Vermeulen, 2004).
Hyoscyamus niger	Native to Europe, Western Asia and northern Africa. Found abundantly on rubbish heaps, in waste places and near old buildings (Vermeulen, 2004).	An annual or biennial herb up to 0, 8 meters, with soft, hairy stems and soft, lobed and sparsely hairy leaves. The petals greyish yellow with dark purple veins. Henbane is characterised by a disgusting smell (Wink and van Wyk, 2008).	Leaves formally smoked to treat asthma. Used in ancient times to treat pain, toothache and nervous disorders such as mania and hysteria. In ancient Greece hyoscyamus served as a poison and as a means to stimulate dementia. Used by Dioscorides, who used it to procure sleep and allay pains. Extracts used as an extract, in cases of epilepsy and convulsive diseases (Vermeulen, 2004).	In Greek myth, the dead were adorned with henbane when they wandered (Vermeulen, 2004).
Mandragora Officanarum	Native to from the Mediterranean region eastwards to the Himalayas (Vermeulen, 2004).	A perennial with thick, tuberous roots of 0 6 meters long that are traditionally thought to resemble the human body and a rosette of dark green leaves. Greenish white flowers appear in spring, which turn into ball-shaped fruits of up to 40 millimetres in diameter . The fruits turn from green to yellow when they ripen (Vermeulen, 2004).	Historically used in1500BC as a recipe against worms. Dioscorides noted its use as a sleep inducing drug, as a narcotic for surgery, against eye disease and as an abortifacient. Mandrake was widely known as an aphrodisiac in ancient Greece. The military strategist Maharbal (200BC) left his enemy several amphora's of wine mixed with mandrake (Lee, 2006).	Used in magic and superstitious practices. Used as symbol of fertility. Root of plant cut in shape of doll had power to make its owner invisible. Plant believed to be most powerful of magical herbs. The owner of the plant believed to be invulnerable in battle (Vermeulen, 2004). During medieval times, Mandragora extracts were used by witches and sorcerers for hallucinogenic purposes (Vermeulen, 2004).

Nicotiana tabacum	Central America and cultivated worldwide (Vermeulen, 2004).	An erect, leafy and single- stemmed annual herb with large, glandular leaves and pink tubular flowers (Wink and van Wyk, 2008) .	Used by Indians who used it for smoking in pre Columbian times. Smoked worldwide. Previously used as an insecticide (Wink and van Wyk, 2008).	Plays part in curative rituals of all tribes of the north east Amazon. In its various forms used as the ordinary medical practice of some tribes. Traditionally used as a recreational drug and decoction used as treatment for bruises and sprains (Vermeulen, 2004).
Solanum Dulcamara	Europe and Asia (naturalised in North America) (Wink and van Wyk, 2008).	A deciduous woody climber up to 0.5 meters bearing simple or lobed leaves, dark purple flowers and attractive berries that are bright red when mature (van Wyk and Wink, 2004).	Ancients drank the roots in wine to induce sleep. Formally used as a narcotic, diuretic, sweat inducer, for skin eruptions, rheumatism and gout, bronchitis and whooping cough (Vermeulen, 2004).	Used in folk medicine for felons, warts and tumours. Folklore suggests its use in protecting against evil. Being tied around the neck believed to be a remedy for vertigo or dizziness of the head. Believed when placed beneath the pillow that it helped one in forgetting past love (Vermeulen, 2004).
Solanum nigrum	Tropical and temperate regions of the world. Weeds of arable land and rubbish tips. Native to Europe and Asia (van Wyk and Wink, 2004).	An annual plant rarely growing 0.5 meters in height and is much branched generally making a bushy-looking mass. The flowers are arranged in clusters and are small and white. The flowers are succeeded by small round berries, green at first, but black when ripe (Grieve, 1981).	Historically the bruised fresh leaves, used externally, were used to abate inflammation and the Arabs applied them to burns and ulcers. Traditionally used to treat ringworm, gout and earache (Grieve, 1981).	In Bohemia the leaves were placed in the cradle of infants to promote sleep (Grieve, 1981).

The data table above thus highlights certain characteristics pertaining to individual species of the *Solanaceae* sample group. Characteristics such as the habitat and distribution of species range from deciduous forests in Europe, Asia and the Mediterranean as seen in *Atropa belladonna*, to tropical countries in Mexico and South America as seen in *Capsicum annuum*. The description of species also varies somewhat and ranges from perennial herbs with soft stems and bright green leaves as seen in *Atropa belladonna* to deciduous woody climbers as seen in *Solanum dulcamara*. The table also highlights the various historical groups such as the ancient Mesopotamians who used *Atropa belladonna* to treat various illnesses and the Aztecs who used *Datura stramonium* as an intoxicant and hallucinogen. The mythology of species is also highlighted in the table. Mythology ranging from the use of plants in magic to

superstition is seen in species such as Atropa belladonna, Mandragora officinarum and Datura stramonium.

SPECIES	ACTIVE PRINCIPLES: Alkaloids	<u>USES</u>	PHYSIOLOGICAL ACTIONS	TOXICOLOGY
Atropa belladonna	Atropine, hyoscyamine, nicotine and Scopolamine (Vermeulen, 2004).	Used as a spasmolytic, mydriatic and to poison arrows (Vermeulen, 2004).	Depressant and sedative effect (Wink and van Wyk, 2008). Narcotic, spasmolytic and hallucinogenic (Vermeulen, 2004).	Hallucinations, euphoria, confusion, Insomnia, mydriasis, dry mucosa, red face and tachycardia (Wink and van Wyk, 2008). Analgesia, tachycardia and insomnia (van Wyk and Wink, 2004).
Capsicum annuum	Capsaicin (van Wyk et al., 2005).	Used as a flavour enhancer and as a catalyst to enhance the flavour of other herbs in food (van Wyk 2005). Used for digestive troubles, relieving toothache, expelling stones from kidneys and to induce menstruation(Vermeulen, 2004) . Topical preparations used as effective pain relief in cases of rheumatism, arthritis, neuralgia, itching ,lumbago and spasms of the upper body. Taken orally as traditional treatment for colic, dyspepsia and flatulence. Extracts used as gargle for laryngitis(van Wyk and Wink, 2004) .	Discomfort, pain, blisters ulceration and necrosis in high concentrations when exposed to skin and mucosa .Erythema and sensation of pain (Wink et al.,2008). Increases perspiration and lowering of the body temperature (Vermeulen, 2004).	High concentrations cause very painful local reactions and severe irritation of the skin and mucous membranes. Toxic doses cause hyperthermia and symptoms similar to anaphylactic shock. Chronic overdosing leads to appetite loss ,chronic gastritis, liver and kidney damage (Wink and van Wyk, 2008).
Datura Stramonium	Atropine, hyoscyamine and scopolamine (Wink and van Wyk, 2008).	Medicinally used as an analgesic, as an ingredient of cough mixture and in cigarettes to treat asthma(Vermeulen, 2004).	Depressant ,sedative effect, neurotoxin (Wink and van Wyk, 2008).	Powerful hallucinations anxiety, excitation, reddening of face, dry mouth, euphoria, mydriasis, confusion, insomnia, respiratory arrest, death (Wink and van Wyk, 2008) . Senseless behaviour and amnesia (Vermeulen, 2004).
Hyoscyamus niger	Atropine hyoscyamine and scopolamine (Wink and van Wyk, 2008).	Used in modern phytotherapy to treat spasms of the gastrointestinal tract (van Wyk and Wink, 2004).In modern medicine, henbane leaf or henbane alkaloids are used in ophthalmology and to treat spasms of the gastrointestinal tract (Wink and van Wyk, 2008).	Para symphpatholytics and has a spasmolytic and sedative effect on the central nervous system (Wink and van Wyk, 2008).	Hallucinations, euphoria, confusion, insomnia, tantrum, respiratory arrest and seizures (Wink and van Wyk, 2008).
Mandragora officinarum	Atropine, hyoscyamine, mandragorine and Scopolamine	Used as a medicine for intestinal worms. Dioscorides noted its use as a sleep inducing drug, as a narcotic for surgery, against eye -disease and as an abortifiacient. Also known as	Narcotic, analgesic hypnotic, spasmodic and aphrodisiac (van Wyk and Wink, 2004).	Hallucinations, euphoria, confusion, insomnia, vertigo, trembling, difficulties in speaking, excitation, nausea,

#### TABLE 6: DATA ANALYSIS TABLE

	(Vermeulen, 2004).	an aphrodisiac in ancient Greece (Wink and van Wyk, 2008).	Neuro poison, hallucinogen (Vermeulen, 2004).	vomiting ,mydriasis and central paralysis (Wink and van Wyk, 2008).
Nicotiana tabacum	Nicotine, nor nicotine, anabasine, <b>n</b> icotyrine (Wink and van Wyk, 2008).	Used for smoking worldwide (Wink and van Wyk, 2008).	Nausea, weakness, headache, salivation, tremor, convulsions, tachycardia, cold perspiration, confusion, Diarrhoea, difficulty breathing and hypertension. Psycadelic feelings and excitation ,burning in mouth and throat, vomiting, seizures and respiratory arrest (Wink and van Wyk, 2008).	Anxiety, irritability, confusion, convulsions, halting speech, dizziness drowsiness, nausea and vomiting, appetite loss, tinnitus and, cough and tremor, tachycardia, and perspiration (Vermeulen, 2004).
Solanum dulcamara	The main alkaloids are glycosides of Soladulcidine, Tomatidenol or Solasodine (van Wyk and Wink, 2004).	Taken orally in supportive treatment of chronic eczema and pruritic skin conditions. Traditional uses include the treatment of catarrh of the upper respiratory tract, bronchitis, asthma and rheumatic conditions (van Wyk and Wink, 2004).	Known to produce antichollernergic effects and antiphlogistic effects. It is also an astringent; antibacterial and antifungal (van Wyk and Wink, 2004).	Abdominal pain, vomiting, diarrhoea, in coordination, weakness depression, hallucinations, convulsions and possible death (Vermeulen, 2004).
Solanum nigrum	Solanine and other steroidal alkaloids(van Wyk and Wink, 2004).	Used to treat digestive disorders, used in the treatment of asthma and to induce fevers. Leaves cooked and eaten and berries eaten in India (Edmunds and Chweya, 1997).	Narcotic and sedative. Disturbances of the gastrointestinal tract (Wink and van Wyk, 2008).	Vomiting, spasms, internal bleeding, salivation, trembling, restlessness, headache, delirium, fever and coma (Wink and van Wyk, 2008).

As in table 5, the data table above highlights characteristics related to the natural history of species belonging to the sample group of *Solanaceae* remedies. In this table, active principles such as the alkaloids atropine, hyoscyamine and scopalamine found in species such as *Atropa belladonna*, *Datura stramonium, Hyoscyamus niger and Mandragora officinarum* are highlighted. Other Alkaloids such as Capsaicin found in *Capsicum annuum* and nicotine found in *Nicotiana Tabacum* are also highlighted in the table. The uses of these species are also highlighted in this table and range from being used as a mydriatic as seen in *Atropa belladonna* to being used as a narcotic and sedative in species such as *Solanum nigrum*. The physiological actions if ingested, as well as the toxicology associated with these species of plants have also been highlighted in the above table. The physiological actions and toxicology such as hallucinations, sedation and confusion as seen in species such as *Datura stramonium* can be related back to the physiological and toxicological effects

discussed regarding the primary alkaloids in Solanaceae plant species highlighted in chapter 2.

#### 4.3) Analysis of keywords

The keywords selected from the data analysis tables (Table 5 and Table 6) were subject to thesaurus consultation using the *Oxford Paperback Thesaurus* (2006) in order to identify synonyms that could facilitate relating general and mental symptoms and the natural history of the remedies in the study. These are listed in table 7.

## Table 7: Sample group remedies and keywords from data analysis tables aswell as their relative synonyms.

REMEDY	KEYWORDS	SYNONYMS
Atropa	Abandoned	Deserted, forsaken, jilted, stranded, rejected, neglected.
belladonna	Waste	Rubbish, refuse, litter, debris, scrap.
	Spasms	Contraction, convulsions, cramps, twitch, jerks, tics.
	Poison	Toxin, toxicant, venom.
	Depressant	Sedative, calmative, hypnotic.
	Sedative	Tranquilizing, calming, calmative, depressant.
	Narcotic	Soporific, opiate, pain killer, pain reliever.
	Hallucinations	Delusion, illusion, vision, chimera.
	Demons	Devil, fiend, evil, spirit, incubus.
	Aphrodisiac	-
	Love	Fondness, tenderness, warmth, attachment, desire.
	Magic	Sorcery, witchcraft, wizardry, occultism.
	Fortune	Luck, fate, destiny, serendipity.
	Flying	Airborne, in the air, in-flight.
	Witches	Sorceress, enchantress, hex.
	Aggression	Hostility, belligerence, violence.
	Fight	Brawl, attack, struggle, grapple, wrestle, quarrel, argue.
	Devil	Satan, Lucifer.
	Euphoria	Elation, happiness, joy, delight, excitement, exhilaration.
	Confusion	Uncertainty, doubt, unsure.
	Insomnia	Sleeplessness, wakefulness, restlessness.
	Dry	Arid, parched, droughty, Scorched, dehydrated.
	Red	Redness.
	Tachycardia	-
	Superstition	Myth, belief, legend, fallacy, delusion, illusion.
	warriors	Soldiers, combatant, fighter.

Salarayuna	Devenition	lite him e
Solanum	Pruritic	Itching.
Dulcamara	Catarrh	-
	Asthma	-
	Rheumatic	-
	Sleep	Nap, doze.
	Narcotic	Soporific, opiate, analgesic, anodyne, sedative.
	Sweat	Perspiration.
	Eruptions	Rash, outbreak, inflammation.
	Cough	Hack, hawk, bark.
	Tumours	Growths, cancer, malignancy, lump.
	Evil	Wicked, bad, wrong, immoral, vicious, malicious, devilish
	Dizziness	Giddiness, shakiness, muzzy, wobbly, vertigo
	Forgetting	Absentminded, abstracted, amnesia.
	Love	Fondness, tenderness, warmth, affection, attachment.
	Pain	Suffering, agony, torture, torment, discomfort.
	Vomiting	Spewing, retching, heaving.
	Weakness	Feebleness, delicacy, sickness, debility, incapacity.
	Depression	Unhappiness, sadness, melancholy, misery, sorrow.
	Hallucinations	Delusions, illusions, visions, chimeras.
	Death	Demise, passing, loss of life.
Datura	Tropical	Hot, sweltering, humid, sultry, oppressive, stifling.
stramonium	Analgesic	Painkilling, pain-relieving, anodyne, narcotic, palliative.
	Gypsy	Wonderer, roamer.
	Asthma	-
	Depressant	Sedative, tranquilizer, calmative.
	Sedative	Tranquilizing, calming, calmative, depressant.
	Intoxicated	Drunk, inebriated, tipsy.
	Hallucinations	Delusions, illusions, visions, chimeras.
	Smoked	Puff on, smoulder, pull on, inhale.
	Misused	Abuse, squander, waste, embezzle.
	Suicide	Self-destruction, self-murder.
	Murder	Killing, homicide, assassination, extermination.
	Crime	Offence, felony, misdemeanour, misdeed.
	Seduction	Alluring, tempting.
	Narcotic	Soporific, opiate, pain killer, pain reliever.
	Anxious	Worried, fearful, nervous, distressed.
	Narcosis	-
	Death	Demise, passing, loss of life.
	Darkness	Blackness, gloom, dimness.
	Love	Fondness, tenderness, warmth, affection, attachment.
	Excitation	-
	Reddening	Turn red, blush, flush, burn.
	Dry	Arid, parched, droughty, scorched, dehydrated.
	Euphoria	Elation, happiness, joy, delight, excitement, exhilaration.
	Confusion	Uncertainty, doubt, unsure.
	Insomnia	Sleeplessness, wakefulness, restlessness.
	Senseless	
	Amnesia	Absentminded, forgetful, abstracted.
	Senseless	Unconscious, stunned, insensible, comatose.

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Hyoscyamus	Waste	Unwanted, excess, scrap, useless.
niger	Old	Dilapidated, run down, decaying.
	Dry	Arid, parched, droughty, scorched, dehydrated.
	Spasms	Contraction, convulsion, cramp, twitch, jerk, tic, shiver.
	Sedative	Tranquilizing, calming, calmative, relaxing.
	Smoked	Puff on, smoulder, pull on, inhale.
	Asthma	-
	Pain	Suffering, agony, torture, torment, discomfort.
	Mania	Madness, derangement, dementia, lunacy, hysteria.
	Hysteria	Panic, frenzy, madness.
	Poison	Toxin, toxicant, venom.
	Stimulate	Encourage, prompt, motivate, trigger, activate.
	Dementia	Mental illness, madness, insanity, derangement, lunacy.
	Sleep	Nap, doze.
	Epilepsy	Nap, 0026.
		- Encomedia jerku nerovuomet vielent uncentrallehle
	Convulsive	Spasmodic, jerky, paroxysmal, violent, uncontrollable.
	Euphoria	Elation, happiness, joy, delight, excitement, exhilaration.
	Confusion	Uncertainty, doubt, unsure.
	Insomnia	Sleeplessness, wakefulness, restlessness.
Capsicum	Tropical	Hot, sweltering, humid, sultry, oppressive, stifling.
annuum	Enhance	Increase, add, intensify, heighten, boost, raise, lift.
	Pain	Suffering, agony, torture, torment, discomfort.
	Itching	Irritation, tingling, pruritic.
	Spasms	Contraction, convulsion, twitch, jerk, tic, shiver, tremor.
	Discomfort	Pain, aches, soreness, tenderness, irritation.
	Ulceration	Sore, abscess, boil, carbuncle, blister.
	Necrosis	-
	Spicy	Peppery, hot, picante, strong, pungent.
	Infection	Disease, disorder, condition, affliction, illness, sickness.
	Sores	Inflammation, swelling, lesion.
	Burns	Be hot, be warm, be feverish, redden, go red, flush.
	Injuries	Wound, bruise, cut, gash, scratch, graze, abrasion.
	Irritation	
		Annoyance, impatience, crossness, displeasure.
	Hyperthermia	
	Appetite	Hunger, ravenous.
Nicotiana	Smoking	Smoke
tabacum	Nausea	Sickness, biliousness, queasiness,
	Weakness	Feebleness, delicacy, sickness, debility, incapacity.
	Headache	Pain in the head, sore head, migraine.
	Salivation	-
	Tremor	Trembling, shaking, shakiness, quivering, twitching.
	Convulsions	Fit, seizure, paroxysm, spasm, attack.
	Tachycardia	-
	Confusion	Uncertainty, doubt, unsure.
	Psycadelic	-
	Excitation	-
	Burning	Fiery, red-hot, scorching.
	Vomiting	Spewing, retching, heaving.
	Seizures	Convulsion fit, spasm, paroxysm.
	Recreational	Pleasure, leisure, relaxation.
1	Bruises	Contusions, marks, blemishes.
	<b>. .</b> .	
	Anxiety	Weary, concern, apprehension, uneasiness, unease.
	Anxiety Irritability Dizziness	Weary, concern, apprehension, uneasiness, unease. Irascibility, touchiness, grumpiness, moodiness. Giddiness, light-headedness, faintness.

	Dec. 21. Constant	
	Drowsiness	Sleepiness, sluggish, tiredness.
	Nausea	Sickness, biliousness, queasiness.
	Tremor	Trembling, shaking, shakiness, tremble, twitching.
	Perspiration	Sweat, hydrosis.
Mandragora	Sleep	Nap, doze.
officinarum	Narcotic	Soporific, opiate, analgesic, palliative.
	Aphrodisiac	-
	Analgesic	Painkilling, anodyne, narcotic, palliative.
	Hypnotic	Mesmerising, mesmeric, spellbinding, bewitching.
	Spasmodic	Intermittent, fitful, irregular, sporadic, erratic.
	Hallucinations	Delusions, illusions, visions, chimeras.
	Magic	Sorcery, witchcraft, wizardry, occultism.
	Superstitious	Credulous, naive, gullible.
	Invisible	Undetectable, inconspicuous, obscured, unnoticed.
	Battle	Brawl, attack, struggle, grapple, wrestle, quarrel, argue.
	Witches	Sorceress, enchantress, hex.
	Euphoria	Elation, happiness, joy, delight, excitement, exhilaration.
	Confusion	Uncertainty, doubt, unsure.
	Insomnia	Sleeplessness, wakefulness, restlessness.
	Vertigo	Dizziness, giddiness, light-headedness, loss of balance.
	Trembling	Shake, quiver, twitch.
	Excitation	-
	Nausea	Sickness, biliousness, queasiness.
	Paralysis	Immobility, powerlessness, incapacity, debilitation
Solanum nigrum	Tropical	Hot, sweltering, humid, sultry.
g	Rubbish	Waste, litter, debris, scrap, dross.
	Asthma	-
	Fever	High temperature, feverishness, pyrexia.
	Bruised	Contusion, mark, discolour, blemish.
	Inflammation	Swelling, puffiness, redness, soreness, infection.
	Burns	Be hot, be warm, be feverish, redden, go red, flush.
	Ulcers	Sore, ulceration, abscess, boil, carbuncle, blister.
	Sleep	Nap, doze.
	Vomiting	Spewing, retch, heave.
	Spasms	Contraction, convulsion, cramp, twitch, jerk, tic, shiver.
	Bleeding	Haemorrhage.
	Salivation	naemonnage.
	Trembling	Shake quiver twitch
	•	Shake, quiver, twitch.
	Restlessness	Unease, restiveness, nervousness, agitation, anxiety.
	Headache	Sore head, pain in the head, migraine.
	Delirium	Derangement, dementia, madness, insanity, hysteria.
	Coma	Unconsciousness.

From this analysis, it is evident that most of these remedies have the following themes in common in terms of their natural history. The themes common to their natural history include anxiety, convulsions, delirium, delusions, excitement, restlessness and twitching.

#### 4.4) Extraction and analysis of rubrics

As explained in the previous chapter, a computer repertory search was carried out using Radar version 10.4 to list all the general and mental rubrics containing the selected eight remedies. This formed the basis of the raw data that was utilised to carry out the investigation into the homoeopathic mental and general symptoms of the selected remedies.

## 4.5) Analysis of keywords, synonyms and related words from general and mental symptoms of the sample group of remedies.

The next step in the analysis process pertains to the investigation of the mental and general rubrics of the homoeopathic remedies belonging to the *Solanaceae* plant family. Rubrics containing the various keywords and synonyms are listed in the tables below:

### Table 8: General and mental symptoms with corresponding rubrics and sub rubrics from the remedy Atropa belladonna

GENERALS - CONVULSIONS
GENERALS - CONVULSIONS - one side
GENERALS - CONVULSIONS - one side - paralysis of the other
GENERALS - CONVULSIONS - right side of body
GENERALS - CONVULSIONS - left side of body
GENERALS - CONVULSIONS - afternoon
GENERALS - CONVULSIONS - night - midnight - after - 3 h
GENERALS - CONVULSIONS - accompanied by - scarlatina
GENERALS - CONVULSIONS - accompanied by - Teeth; complaints of
GENERALS - CONVULSIONS - alternating with - tonic cramps
GENERALS - CONVULSIONS - apoplectic
GENERALS - CONVULSIONS - begin in - Arm
GENERALS - CONVULSIONS - brain - congestion of - with
GENERALS - CONVULSIONS - bright light, from
GENERALS - CONVULSIONS - changing - character; in
GENERALS - CONVULSIONS - children; in
GENERALS - CONVULSIONS - children; in - infants, in
GENERALS - CONVULSIONS - children; in - newborns
GENERALS - CONVULSIONS - clonic
GENERALS - CONVULSIONS - clonic - alternating with tonic
GENERALS - CONVULSIONS - clonic - chill; during
GENERALS - CONVULSIONS - clonic - fever; during
GENERALS - CONVULSIONS - clonic - perspiration; during

GENERALS - CONVULSIONS - cold - air - agg. GENERALS - CONVULSIONS - cold agg.; becoming GENERALS - CONVULSIONS - coldness; with - Feet; of - head hot; and GENERALS - CONVULSIONS - colic. during GENERALS - CONVULSIONS - consciousness - with GENERALS - CONVULSIONS - consciousness - without GENERALS - CONVULSIONS - cough - during - agg. GENERALS - CONVULSIONS - delivery - after GENERALS - CONVULSIONS - dentition; during GENERALS - CONVULSIONS - drinking - after - agg. GENERALS - CONVULSIONS - drugs; after GENERALS - CONVULSIONS - epileptic GENERALS - CONVULSIONS - epileptic - after epileptic convulsions; complaints - nausea GENERALS - CONVULSIONS - epileptic - after epileptic convulsions; complaints - vomiting GENERALS - CONVULSIONS - epileptic - aura - auditory complaints GENERALS - CONVULSIONS - epileptic - aura - headache GENERALS - CONVULSIONS - epileptic - aura - mouse running; sensation of a GENERALS - CONVULSIONS - epileptic - aura - visual complaints GENERALS - CONVULSIONS - epileptic - aura - Arms, in GENERALS - CONVULSIONS - epileptic - aura - Arms, in - Forearms, in GENERALS - CONVULSIONS - epileptic - aura - Limbs, in GENERALS - CONVULSIONS - epileptic - aura - Solar plexus, from GENERALS - CONVULSIONS - epileptic - aura - Stomach, in GENERALS - CONVULSIONS - epileptic - aura - Stomach, in - heat GENERALS - CONVULSIONS - epileptic - children: in GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - froth, foam from mouth GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - mouse running up a limb; sensation of GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - pupils - dilated GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - vertigo GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Face - bluish GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Face - pale GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Face - red GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Larynx; spasms in GENERALS - CONVULSIONS - epileptic - recent cases GENERALS - CONVULSIONS - epileptic - status epilepticus GENERALS - CONVULSIONS - epileptic - touch; slightest **GENERALS - CONVULSIONS - epileptiform GENERALS - CONVULSIONS - eruptions** GENERALS - CONVULSIONS - excitement agg. GENERALS - CONVULSIONS - falling; with GENERALS - CONVULSIONS - falling; with - right side GENERALS - CONVULSIONS - falling; with - left side GENERALS - CONVULSIONS - falling; with - backward GENERALS - CONVULSIONS - falling; with - sideways GENERALS - CONVULSIONS - fright agg. GENERALS - CONVULSIONS - heat; during GENERALS - CONVULSIONS - hemorrhage - after GENERALS - CONVULSIONS - hydrocephalus; with GENERALS - CONVULSIONS - hydrophobia with GENERALS - CONVULSIONS - hysterical GENERALS - CONVULSIONS - labor; during GENERALS - CONVULSIONS - light; from GENERALS - CONVULSIONS - liquids agg. GENERALS - CONVULSIONS - measles; during

GENERALS - CONVULSIONS - menses - before - agg GENERALS - CONVULSIONS - menses - during - agg. GENERALS - CONVULSIONS - mental exertion; after GENERALS - CONVULSIONS - moon - full moon GENERALS - CONVULSIONS - motion agg. GENERALS - CONVULSIONS - opisthotonos; with GENERALS - CONVULSIONS - pain - during GENERALS - CONVULSIONS - pain - renewed convulsion at every attack of pain GENERALS - CONVULSIONS - paralysis - with **GENERALS - CONVULSIONS - perspiration - during** GENERALS - CONVULSIONS - pregnancy agg.; during (= eclampsia) GENERALS - CONVULSIONS - prodrome, as a GENERALS - CONVULSIONS - puerperal GENERALS - CONVULSIONS - shining objects, from GENERALS - CONVULSIONS - shrieking, with GENERALS - CONVULSIONS - sleep - deep sleep after convulsions GENERALS - CONVULSIONS - sleep - during - agg. GENERALS - CONVULSIONS - sleep - sleeplessness; with or after **GENERALS - CONVULSIONS - splinters** GENERALS - CONVULSIONS - stretching out - limbs; of - during convulsions GENERALS - CONVULSIONS - sudden GENERALS - CONVULSIONS - tetanic rigidity GENERALS - CONVULSIONS - tetanic rigidity - accompanied by - opisthotonos GENERALS - CONVULSIONS - tetanic rigidity - splinters, from GENERALS - CONVULSIONS - tetanic rigidity - trismus, with GENERALS - CONVULSIONS - tetanic rigidity - wounds in the soles, finger or palm; from GENERALS - CONVULSIONS - tonic GENERALS - CONVULSIONS - tonic - chill; during GENERALS - CONVULSIONS - tonic - fever; during GENERALS - CONVULSIONS - tonic - perspiration; during GENERALS - CONVULSIONS - touch agg. GENERALS - CONVULSIONS - uremic GENERALS - CONVULSIONS - vexation; after **GENERALS - CONVULSIONS - violent** GENERALS - CONVULSIONS - waking; on GENERALS - CONVULSIONS - water - sight of; at the GENERALS - CONVULSIONS - worms; from GENERALS - CONVULSIONS - Internally GENERALS - CONVULSIONS - Muscles: striated GENERALS - DRY sensation - Internal parts; in GENERALS - DRYNESS of usually moist internal parts GENERALS - HEMORRHAGE - blood - bright red GENERALS - JERKING - convulsions, as in GENERALS - JERKING - Internally **GENERALS - JERKING - Joints** GENERALS - JERKING - Muscles, of GENERALS - JERKING - Muscles, of - sleep - during - agg. GENERALS - MUCOUS MEMBRANES; complaints of - discoloration of - red GENERALS - MUCOUS MEMBRANES; complaints of - discoloration of - red - bright red GENERALS - MUCOUS MEMBRANES; complaints of - dryness GENERALS - MUCOUS MEMBRANES; complaints of - dryness - fever; during GENERALS - NARCOTICS - agg. GENERALS - NARCOTICS - ailments from GENERALS - PARALYSIS - one side - convulsions - after GENERALS - PARALYSIS - one side - convulsions - Well side; of the GENERALS - REDNESS

GENERALS - REDNESS - Affected parts GENERALS - REDNESS - Glands **GENERALS - TWITCHING** GENERALS - TWITCHING - fever; during GENERALS - TWITCHING - menses - during - agg. GENERALS - TWITCHING - perspiration; during GENERALS - TWITCHING - sleep - during - agg. GENERALS - TWITCHING - sleep - going to sleep; on - agg. GENERALS - TWITCHING - subsultus tendinum GENERALS - TWITCHING - waking; on **GENERALS - TWITCHING - Muscles** GENERALS - TWITCHING - Muscles - chill; during GENERALS - TWITCHING - Muscles - fever; during GENERALS - TWITCHING - Muscles - perspiration; during GENERALS - WEATHER - dry - agg. GENERALS - WEATHER - dry - amel. GENERALS - WIND - cold - dry - agg. GENERALS - WIND - dry - agg. MIND - AFFECTIONATE MIND - COMA - convulsions; with MIND - COMA - delirium; with MIND - COMA - face - red face; with MIND - CONFUSION of mind MIND - CONFUSION of mind - morning MIND - CONFUSION of mind - morning - rising - after MIND - CONFUSION of mind - morning - rising - when MIND - CONFUSION of mind - evening MIND - CONFUSION of mind - night MIND - **CONFUSION** of mind - night - lying down, on MIND - CONFUSION of mind - air, in open - amel. MIND - CONFUSION of mind - beer, from MIND - CONFUSION of mind - concentrate the mind, on attempting to MIND - CONFUSION of mind - dream, as if in a MIND - CONFUSION of mind - drinking - after MIND - CONFUSION of mind - eating - after MIND - CONFUSION of mind - fever; during MIND - CONFUSION of mind - heat, during MIND - CONFUSION of mind - intoxicated - as after being MIND - CONFUSION of mind - intoxicated - as if MIND - CONFUSION of mind - motion, from MIND - CONFUSION of mind - perspiration, during MIND - CONFUSION of mind - rising - after MIND - CONFUSION of mind - sitting, while MIND - CONFUSION of mind - smoking - after MIND - CONFUSION of mind - spirituous liquors, from MIND - CONFUSION of mind - vertigo, with MIND - CONFUSION of mind - waking, on MIND - CONFUSION of mind - walking MIND - CONFUSION of mind - warm room, in MIND - DELIRIUM - convulsions - after MIND - DELIRIUM - convulsions - during MIND - **DELUSIONS** (= imaginations) MIND - DELUSIONS - evening MIND - DELUSIONS - evening - going tosleep; on MIND - DELUSIONS - night MIND - DELUSIONS - accidents - sees accidents

MIND - DELUSIONS - activity, with MIND - DELUSIONS - animals MIND - DELUSIONS - animals - bed - on MIND - DELUSIONS - animals - black animals; seeing MIND - DELUSIONS - animals - black animals; seeing - walls and furniture; seeing black animals on MIND - DELUSIONS - animals - creeping MIND - DELUSIONS - animals - creeping - shirt; in MIND - DELUSIONS - animals - dark colored MIND - DELUSIONS - animals - fierce, with horns and bushy heads MIND - DELUSIONS - animals - fire, in the MIND - DELUSIONS - animals - frightful MIND - DELUSIONS - animals - persons are animals MIND - **DELUSIONS** - animals - persons are animals - rats, mice, insects etc. MIND - DELUSIONS - animals - persons are animals - unclean animals MIND - DELUSIONS - arrested, is about to be MIND - **DELUSIONS** - assembled things, swarms, crowds etc. MIND - **DELUSIONS** - awakened; he is - fright or alarm; awakened in MIND - DELUSIONS - bats, of MIND - DELUSIONS - beautiful MIND - DELUSIONS - beautiful - things look MIND - DELUSIONS - bed - bouncing her bed up and down; someone is MIND - DELUSIONS - bed - falling - through the bed MIND - DELUSIONS - bed - noise; something under her bed were making a MIND - DELUSIONS - bed - sinking - bed is sinking MIND - DELUSIONS - bed - sinking - she is sinking - through the bed MIND - DELUSIONS - bed - someone - take away the bedclothes; someone tries MIND - **DELUSIONS** - bed - someone - under the bed; someone is MIND - **DELUSIONS** - bed - someone - under the bed; someone is - knocking MIND - DELUSIONS - beetles, worms etc. MIND - DELUSIONS - bird - seeing birds MIND - DELUSIONS - black - objects and people, sees MIND - DELUSIONS - blind; he is MIND - DELUSIONS - body - cut through; he is MIND - DELUSIONS - body - cut through; he is - two; in MIND - DELUSIONS - body - putrefy, will MIND - DELUSIONS - body - sink down between the thighs; body will MIND - DELUSIONS - body - spotted brown, is MIND - DELUSIONS - bulls, of MIND - DELUSIONS - business - doing business; is MIND - DELUSIONS - business - ordinary, they are pursuing MIND - DELUSIONS - butterflies, of MIND - DELUSIONS - calls - someone calls MIND - DELUSIONS - calls - someone calls - waking; on MIND - DELUSIONS - cats - sees MIND - DELUSIONS - cats - sees - black MIND - DELUSIONS - caught; he will be MIND - DELUSIONS - chill; during MIND - DELUSIONS - churchyard - visits a MIND - DELUSIONS - cockroaches swarmed about the room MIND - DELUSIONS - conversing; as if MIND - DELUSIONS - criminals, about MIND - DELUSIONS - cucumbers on the bed; sees MIND - DELUSIONS - dead - corpse - tall yellow corpse is trying to share the bed with him - ejected; and he is promptly MIND - DELUSIONS - dead - persons, sees MIND - DELUSIONS - devil

MIND - DELUSIONS - devil - sees MIND - DELUSIONS - devil - taken by the devil; he will be MIND - DELUSIONS - die - about to die; one was MIND - DELUSIONS - die - time has come to MIND - DELUSIONS - divided - two parts; into MIND - DELUSIONS - divided - two parts; into - cut in two parts; or MIND - DELUSIONS - dogs - black MIND - DELUSIONS - dogs - he is a dog MIND - DELUSIONS - dogs - he is a dog - growls and barks MIND - DELUSIONS - dogs - sees MIND - DELUSIONS - dogs - swarm about him MIND - DELUSIONS - doomed, being MIND - DELUSIONS - drinking - is drinking; he MIND - DELUSIONS - drunk - is drunk; he MIND - **DELUSIONS** - eating - is eating; he MIND - **DELUSIONS** - engaged - occupation; he is engaged in some MIND - DELUSIONS - engaged - occupation; he is engaged in some - ordinary occupation MIND - DELUSIONS - enlarged MIND - DELUSIONS - enlarged - body is MIND - DELUSIONS - enlarged - body is - parts of body MIND - DELUSIONS - enlarged - eyes are MIND - DELUSIONS - faces, sees MIND - DELUSIONS - faces, sees - closing eyes, on MIND - **DELUSIONS** - faces, sees - ugly (= hideous) MIND - DELUSIONS - falling - he is MIND - DELUSIONS - falling - he is - deep MIND - **DELUSIONS** - falling - height; from a MIND - DELUSIONS - fancy, illusions of MIND - DELUSIONS - fancy, illusions of - heat, during MIND - DELUSIONS - fancy, illusions of - sleep - during MIND - DELUSIONS - fantasies are forced upon him; a multitude of MIND - DELUSIONS - fever - during MIND - DELUSIONS - fiery MIND - DELUSIONS - figures - seeing figures MIND - **DELUSIONS** - figures - seeing figures - strange (= grimaces) MIND - DELUSIONS - fire MIND - DELUSIONS - fire - home; on a distant MIND - DELUSIONS - fire - house, on MIND - DELUSIONS - fire - visions of MIND - DELUSIONS - fishes, flies, etc.; sees MIND - DELUSIONS - flies; sees MIND - DELUSIONS - floating MIND - DELUSIONS - floating - air, in MIND - DELUSIONS - floating - air, in - evening MIND - DELUSIONS - floating - bed - suspended in bed MIND - DELUSIONS - floating - bed - swimming in bed MIND - DELUSIONS - floating - boat; floating in a MIND - DELUSIONS - flying MIND - DELUSIONS - flying - must fly; as if he MIND - DELUSIONS - foolish MIND - DELUSIONS - friend - surrounded by friends; being MIND - DELUSIONS - fright - after MIND - DELUSIONS - fright - as if in a fright MIND - DELUSIONS - fright - as if in a fright - waking; on MIND - DELUSIONS - gallows with fear; vision of MIND - DELUSIONS - gathering objects from pictures and walls; making efforts a

MIND - DELUSIONS - giants, sees MIND - DELUSIONS - glittering - objects were glittering and too bright MIND - DELUSIONS - great person, is a MIND - DELUSIONS - grief - anger; delusion from grief and MIND - DELUSIONS - groans - with MIND - DELUSIONS - ground - coming up to meet him; ground were MIND - DELUSIONS - gun, uses a stick for a MIND - DELUSIONS - head - friend's head stick out of a bottle; sees his MIND - DELUSIONS - head - separated from body; head is MIND - DELUSIONS - head - shaking the MIND - DELUSIONS - head - transparent and speckled brown MIND - DELUSIONS - head - two heads, having MIND - DELUSIONS - hearing - illusions of MIND - DELUSIONS - herbs, gathering MIND - DELUSIONS - home - away from home; he is MIND - DELUSIONS - horses MIND - DELUSIONS - horses - seeing MIND - DELUSIONS - images, phantoms; sees MIND - DELUSIONS - images, phantoms; sees - night MIND - DELUSIONS - images, phantoms; sees - black MIND - DELUSIONS - images, phantoms; sees - closing eyes, on MIND - DELUSIONS - images, phantoms; sees - closing eyes, on - bed; in MIND - DELUSIONS - images, phantoms; sees - dark, in the MIND - DELUSIONS - mice - sees MIND - DELUSIONS - money - counting money; he is MIND - DELUSIONS - mortification - after MIND - **DELUSIONS** - murdered - being murdered; he is MIND - DELUSIONS - murdered - will be murdered; he MIND - DELUSIONS - noise - hearing noise MIND - DELUSIONS - objects; about - colored; brilliantly MIND - DELUSIONS - objects; about - persons; are MIND - DELUSIONS - objects; about - reel MIND - DELUSIONS - objects; about - seize objects; tries to MIND - DELUSIONS - officer, he is an MIND - DELUSIONS - pendulum - vertigo were like the vibration of a pendulum MIND - DELUSIONS - people - behind him; someone is MIND - **DELUSIONS** - people - beside him; people are MIND - **DELUSIONS** - people - conversing with absent people MIND - **DELUSIONS** - people - seeing people MIND - DELUSIONS - people - seeing people - closing eyes; on MIND - DELUSIONS - persecuted - he is persecuted MIND - DELUSIONS - pleasing delusions MIND - DELUSIONS - pleasing delusions - morning - sleep; after MIND - DELUSIONS - policeman - physician is a policeman MIND - DELUSIONS - poor; he is MIND - DELUSIONS - possessed; being MIND - DELUSIONS - pursued; he was MIND - DELUSIONS - pursued; he was - enemies, by MIND - DELUSIONS - pursued; he was - police, by MIND - DELUSIONS - pursued; he was - soldiers, by MIND - DELUSIONS - rats, sees MIND - DELUSIONS - religious MIND - DELUSIONS - riding; as if - ox; riding on an MIND - DELUSIONS - rocked; one were being MIND - DELUSIONS - room - people; sees - passing in and out, who wanted to take her away; room were full of strange men

MIND - DELUSIONS - sensations; misrepresents his MIND - DELUSIONS - shoot with a cane: tries to MIND - DELUSIONS - sick - being MIND - DELUSIONS - sight and hearing, of MIND - **DELUSIONS** - sleep - falling asleep; delusions on MIND - DELUSIONS - sleeping - not slept enough; he had MIND - DELUSIONS - sleeping - not slept enough; he had - morning; in the MIND - DELUSIONS - snakes MIND - DELUSIONS - snakes - crimson serpent fastening on his neck MIND - DELUSIONS - snakes - in and around her MIND - DELUSIONS - soldiers - seeing MIND - DELUSIONS - specters, ghosts, spirits MIND - DELUSIONS - specters, ghosts, spirits - closing eyes, on MIND - DELUSIONS - specters, ghosts, spirits - fire, in MIND - DELUSIONS - specters, ghosts, spirits - seeing MIND - DELUSIONS - stabbed - person who passed on the street; he had stabbed a MIND - DELUSIONS - strange - familiar things seem strange MIND - DELUSIONS - strangers - room; seem to be in the MIND - DELUSIONS - strangers - room; seem to be in the - snatch at her; who MIND - DELUSIONS - talking - dead people; with MIND - DELUSIONS - talking - dead people; with - sister; with his MIND - DELUSIONS - talking - dead people; with - sister; with his - churchyard; in MIND - DELUSIONS - talking - imaginary persons; loudly and incoherently to MIND - DELUSIONS - talking - spirits, with MIND - DELUSIONS - thieves - seeing MIND - DELUSIONS - tongue - pulling out his tongue; someone is MIND - **DELUSIONS** - touching - everything; he was touching MIND - DELUSIONS - transparent - he is MIND - DELUSIONS - transparent - head and nose are MIND - DELUSIONS - travelling, of MIND - DELUSIONS - trees - people in fantastic costume; seem to be - afternoon - riding; while MIND - DELUSIONS - turn - everything turned MIND - DELUSIONS - turn - everything turned - circle; in a MIND - DELUSIONS - turtles in room, sees large MIND - **DELUSIONS** - unpleasant MIND - DELUSIONS - unpleasant - distinct from surrounding objects MIND - DELUSIONS - vertigo - having vertigo MIND - DELUSIONS - vexation - after MIND - DELUSIONS - violent MIND - DELUSIONS - visions, has MIND - DELUSIONS - visions, has - daytime MIND - DELUSIONS - visions, has - beautiful MIND - DELUSIONS - visions, has - closing the eyes, on MIND - DELUSIONS - visions, has - fantastic MIND - DELUSIONS - visions, has - hide; wishes to MIND - DELUSIONS - visions, has - horrible MIND - DELUSIONS - visions, has - horrible - dark, in the MiIND - DELUSIONS - visions, has - horrible - fright; from MIND - DELUSIONS - visions, has - monsters, of MIND - DELUSIONS - vivid MIND - DELUSIONS - voices - hearing MIND - DELUSIONS - voices - hearing - dead people, of MIND - DELUSIONS - voices - hearing - distant MIND - DELUSIONS - voices - hearing - strangers, of MIND - DELUSIONS - walls - horrible things on the walls; sees MIND - DELUSIONS - war

MIND - DELUSIONS - war - being at MIND - DELUSIONS - washing, of MIND - DELUSIONS - wealth, of MIND - DELUSIONS - well, he is MIND - DELUSIONS - whistling, with MIND - DELUSIONS - wolves, of MIND - DELUSIONS - work - hard; is working MIND - DELUSIONS - world - she has her own little MIND - DELUSIONS - Nose - transparent nose; has a MIND - DOUBTFUL MIND - DOUBTFUL - salvation; of MIND - EXCITEMENT MIND - EXCITEMENT - agg. MIND - EXCITEMENT - chill - during MIND - EXCITEMENT - eating - amel. MIND - EXCITEMENT - fever: during MIND - EXCITEMENT - heat - during heat; excitement MIND - EXCITEMENT - nervous MIND - EXCITEMENT - nervous - chill; during MIND - EXCITEMENT - nervous - dentition; from MIND - EXCITEMENT - nervous - fever; during MIND - EXCITEMENT - nervous - perspiration; during MIND - EXCITEMENT - perspiration, during MIND - EXCITEMENT - waking, on MIND - EXHILARATION MIND - EXHILARATION - children; in MIND - FEAR - evil; fear of MIND - FEAR - poisoned - being poisoned; fear of MIND - RESTLESSNESS MIND - RESTLESSNESS - morning MIND - RESTLESSNESS - noon MIND - RESTLESSNESS - night MIND - RESTLESSNESS - abdomen; with complaints of MIND - RESTLESSNESS - anxious MIND - RESTLESSNESS - bed - driving out of MIND - RESTLESSNESS - bed - go from one bed to another; wants to MIND - RESTLESSNESS - bed - in MIND - RESTLESSNESS - bed - tossing about in MIND - RESTLESSNESS - busy MIND - RESTLESSNESS - children, in MIND - RESTLESSNESS - children, in - roving (= wandering) MIND - RESTLESSNESS - chill - during MIND - RESTLESSNESS - drink, at the sight of MIND - RESTLESSNESS - drives him from place to place MIND - RESTLESSNESS - driving about MIND - RESTLESSNESS - feverish MIND - RESTLESSNESS - feverish - scarlet fever MIND - RESTLESSNESS - headache, during MIND - RESTLESSNESS - heat - during MIND - RESTLESSNESS - menses - during MIND - RESTLESSNESS - move - must constantly MIND - RESTLESSNESS - pain, from MIND - RESTLESSNESS - perspiration - during MIND - RESTLESSNESS - stool - during MIND - **RESTLESSNESS** - typhus fever; with MIND - RESTLESSNESS - waking, on

#### MIND - VIOLENT

MIND - VIOLENT - deeds of violence; rage leading to

From the above table it is evident that *Atropa belladonna* exhibits general symptoms such as convulsions ranging from clonic to epileptiform, with much jerking, twitching and violence. The mental symptoms exhibited symptoms ranging from being affectionate, confusion of mind and delusions with seeing insects and wolves. Mental symptoms such as fear, restlessness and violence also featured in the table.

### Table 9: General and mental symptoms with corresponding rubrics and sub rubrics for the remedy Solanum dulcamara

GENERALS - CANCEROUS affections
GENERALS - CANCEROUS affections - ulcers - Glands
GENERALS - CATARRH - accompanied by - measles
GENERALS - CATARRH - chronic - Mucous membranes
GENERALS - COUGH - during - agg.
GENERALS - INFLAMMATION - Externally
GENERALS - INFLAMMATION - Glands; of
GENERALS - INFLAMMATION - Internally
GENERALS - INFLAMMATION - Joints; of
GENERALS - INFLAMMATION - Joints; of - deformans; arthritis
GENERALS - INFLAMMATION - Joints; of - subacute
GENERALS - INFLAMMATION - Mucous membranes
GENERALS - INFLAMMATION - Sinuses; of (= sinusitis)
GENERALS - INFLAMMATION - Sinuses; of - chill; after
GENERALS - INFLAMMATION - Sinuses; of - weather - cold - wet - agg.
GENERALS - PAIN
GENERALS - PAIN - morning
GENERALS - PAIN - aching
GENERALS - PAIN - benumbing
GENERALS - PAIN - biting pain
GENERALS - PAIN - blow; pain as from a
GENERALS - PAIN - boring pain
GENERALS - PAIN - boring pain - outward
GENERALS - PAIN - burning - stinging
GENERALS - PAIN - bursting pain
GENERALS - PAIN - chill; during
GENERALS - PAIN - compressed; as if forcefully
GENERALS - PAIN - cramping
GENERALS - PAIN - digging pain (= burrowing, rooting sensation)
GENERALS - PAIN - drawing pain
GENERALS - PAIN - dull pain
GENERALS - PAIN - during - agg.
GENERALS - PAIN - gnawing pain
GENERALS - PAIN - gouty
GENERALS - PAIN - gouty - Joints

GENERALS - PAIN - neuralgic GENERALS - PAIN - paralyzed; as if GENERALS - PAIN - pinching pain GENERALS - PAIN - pressing pain - inward GENERALS - PAIN - pressing pain - together GENERALS - PAIN - pressing pain - within outward, from **GENERALS - PAIN - rheumatic** GENERALS - PAIN - rheumatic - motion - amel. GENERALS - PAIN - rheumatic - weather - cold - wet - agg. GENERALS - PAIN - rheumatic - Muscles GENERALS - PAIN - sore (= bruised) GENERALS - PAIN - squeezed; as if GENERALS - PAIN - stitching pain GENERALS - PAIN - stitching pain - outward GENERALS - **PAIN** - tearing pain - downward GENERALS - PAIN - tearing pain - upward GENERALS - **PAIN** - twisting pain GENERALS - PAIN - waves; in GENERALS - PAIN - extending to - Outward GENERALS - PAIN - extending to - Upward GENERALS - PAIN - Bones GENERALS - PAIN - Bones - boring pain GENERALS - PAIN - Bones - burrowing GENERALS - PAIN - Bones - digging pain GENERALS - PAIN - Bones - stitching pain GENERALS - PAIN - Bones - tearing pain GENERALS - PAIN - External parts GENERALS - PAIN - External parts - dislocated; as if GENERALS - PAIN - Externally GENERALS - PAIN - Externally - burning GENERALS - PAIN - Externally - constricting GENERALS - PAIN - Externally - cutting pain GENERALS - PAIN - Externally - gnawing pain GENERALS - PAIN - Externally - jerking GENERALS - PAIN - Externally - pinching pain GENERALS - PAIN - Externally - pressing pain GENERALS - PAIN - Externally - sore GENERALS - **PAIN** - Externally - stitching pain GENERALS - PAIN - Externally - tearing pain GENERALS - PAIN - Externally - ulcerative pain GENERALS - PAIN - Glands GENERALS - PAIN - Glands - burrowing GENERALS - PAIN - Glands - digging pain GENERALS - PAIN - Glands - drawing pain GENERALS - PAIN - Glands - tearing pain **GENERALS - PAIN - Internal parts** GENERALS - PAIN - Internal parts - dislocated; as if GENERALS - PAIN - Internally GENERALS - PAIN - Internally - burning GENERALS - PAIN - Internally - constricting GENERALS - PAIN - Internally - cutting pain GENERALS - PAIN - Internally - gnawing pain GENERALS - PAIN - Internally - pinching pain GENERALS - PAIN - Internally - pressing pain GENERALS - PAIN - Internally - stitching pain GENERALS - PAIN - Internally - tearing pain

**GENERALS - PAIN - Joints** GENERALS - PAIN - Joints - cramping GENERALS - PAIN - Joints - dislocated; as if GENERALS - PAIN - Joints - gnawing pain GENERALS - PAIN - Joints - pressing pain GENERALS - PAIN - Joints - sore GENERALS - PAIN - Joints - stitching pain GENERALS - PAIN - Joints - stitching pain - tearing GENERALS - PAIN - Joints - tearing pain GENERALS - PAIN - Joints - tearing pain - sticking pain GENERALS - PAIN - Muscles (= myalgia) GENERALS - PAIN - Muscles - cramping GENERALS - PAIN - Muscles - drawing pain GENERALS - PAIN - Muscles - fever; during GENERALS - PAIN - Muscles - fever; during - tearing pain GENERALS - PAIN - Muscles - perspiration; during GENERALS - PAIN - Muscles - perspiration; during - tearing pain GENERALS - PAIN - Muscles - stitching pain GENERALS - PAIN - Muscles - tearing pain GENERALS - PAIN - Muscles - tearing pain - cramping GENERALS - PAIN - Muscles - tearing pain - jerking pain GENERALS - PAIN - Muscles - tearing pain - sticking pain **GENERALS - TUMORS** MIND - ABSENTMINDED MIND - ABSENTMINDED - morning MIND - ABSENTMINDED - afternoon MIND - ABSENTMINDED - evening MIND - **ABSENTMINDED** - conversing, when MIND - ABSENTMINDED - dreamy (= daydreaming) MIND - ABSENTMINDED - inadvertence MIND - ABSENTMINDED - reading; while MIND - ABSENTMINDED - stands in one place and never accomplishes what he undertakes MIND - ABSENTMINDED - work; when at MIND - DEATH - desires MIND - **DELUSIONS** (= imaginations) MIND - DELUSIONS - morning MIND - DELUSIONS - morning - bed, in MIND - DELUSIONS - night MIND - DELUSIONS - animals MIND - DELUSIONS - animals - creeping MIND - DELUSIONS - animals - creeping - in her MIND - DELUSIONS - animals - creeping - on him MIND - DELUSIONS - bed - falling - through the bed MIND - DELUSIONS - bed - sinking - bed is sinking MIND - DELUSIONS - bed - sinking - she is sinking - through the bed MIND - DELUSIONS - beetles, worms etc. MIND - DELUSIONS - calls - someone calls MIND - DELUSIONS - calls - someone calls - waking; on MIND - DELUSIONS - devil MIND - DELUSIONS - devil - sees MIND - DELUSIONS - disabled, she is MIND - DELUSIONS - fancy, illusions of MIND - DELUSIONS - floating MIND - DELUSIONS - floating - air, in MIND - DELUSIONS - floating - driving, while MIND - DELUSIONS - flying

MIND - DELUSIONS - flying - could fly; as if he MIND - **DELUSIONS** - flying - could fly; as if he - raised from the ground; and he were MIND - DELUSIONS - fright - after MIND - DELUSIONS - hearing - illusions of MIND - DELUSIONS - images, phantoms; sees MIND - DELUSIONS - interest in anything; felt no MIND - DELUSIONS - large - parts of body seem too large MIND - DELUSIONS - misunderstood; she is MIND - DELUSIONS - music - thinks he hears MIND - DELUSIONS - neglected - duty; he has neglected his MIND - DELUSIONS - noise - hearing noise MIND - DELUSIONS - people - behind him; someone is MIND - **DELUSIONS** - people - beside him; people are MIND - DELUSIONS - poisoned - he - about to be poisoned; he is MIND - DELUSIONS - prisoner; she is a MIND - DELUSIONS - specters, ghosts, spirits MIND - **DELUSIONS** - specters, ghosts, spirits - morning - waking; on MIND - DELUSIONS - specters, ghosts, spirits - morning - waking; on - enlarge until it disappears; a specter continues to MIND - DELUSIONS - specters, ghosts, spirits - seeing MIND - DELUSIONS - thieves - house, in MIND - DELUSIONS - unreal - everything seems unreal MIND - DELUSIONS - visions, has MIND - DELUSIONS - visions, has - night MIND - DELUSIONS - visions, has - horrible MIND - DELUSIONS - visions, has - horrible - night MIND - DELUSIONS - waking; on MIND - DELUSIONS - want - he will come to MIND - DELUSIONS - weeping; with MIND - DELUSIONS - work - accomplish her work; she cannot MIND - DELUSIONS - wrong - doing something wrong; he is MIND - DESPAIR - death - thoughts of; with MIND - FORGETFUL MIND - FORGETFUL - evening MIND - FORGETFUL - headache; during MIND - PAIN - during MIND - RESTLESSNESS MIND - RESTLESSNESS - morning MIND - RESTLESSNESS - morning - waking, on MIND - RESTLESSNESS - noon MIND - RESTLESSNESS - afternoon MIND - RESTLESSNESS - evening MIND - RESTLESSNESS - night MIND - RESTLESSNESS - anxious MIND - RESTLESSNESS - bed - driving out of MIND - RESTLESSNESS - bed - in MIND - RESTLESSNESS - bed - tossing about in MIND - RESTLESSNESS - busy MIND - RESTLESSNESS - driving about MIND - RESTLESSNESS - headache, during MIND - RESTLESSNESS - idle; when MIND - RESTLESSNESS - internal MIND - RESTLESSNESS - move - must constantly MIND - **RESTLESSNESS** - sitting, while MIND - RESTLESSNESS - sleep - before MIND - RESTLESSNESS - tremulous

MIND - RESTLESSNESS - waking, on	
MIND - RESTLESSNESS - women, in	
MIND - RESTLESSNESS - working, while	
MIND - SADNESS - morning	
MIND - SADNESS - morning - bed; in	
MIND - SADNESS - noon	
MIND - SADNESS - afternoon	
MIND - SADNESS - evening	
MIND - SADNESS - night	
MIND - SADNESS - bad news, after	
MIND - SADNESS - brooding; with	
MIND - SADNESS - children, in	
MIND - SADNESS - conversation - amel.	
MIND - SADNESS - disappointment, from	
MIND - SADNESS - exertion, after	
MIND - SADNESS - exhilaration, after	
MIND - SADNESS - headache - during	
MIND - SADNESS - pain, from	
MIND - SADNESS - weather - wet	
MIND - STUPEFACTION - vertigo – during	
MIND - WEEPING - delusions, after	

From the above table it is evident that *Solanum dulcamara* exhibits general symptoms such as cancerous affections, inflammation and pain ranging from aching to tearing pain. Mental symptoms exhibited in the table included absentmindedness and delusions ranging from seeing the devil to delusions with weeping. Mental symptoms such as restlessness and sadness were also present in table 9.

#### Table: 10 General and mental symptoms with corresponding rubrics and subrubrics from the remedy *Datura stramonium*

GENERALS - HEMORRHAGE - blood - bright red
GENERALS - INTOXICATION, after
MIND - ABUSIVE (= abusive language)
MIND - ABUSIVE - causeless
MIND - ABUSIVE - children
MIND - ABUSIVE - children - weeping; with
MIND – AFFECTIONATE
MIND - AILMENTS FROM - <b>love</b> ; disappointed
MIND - ANXIETY
MIND - ANXIETY - night
MIND - ANXIETY - night - children; in
MIND - ANXIETY - children - in
MIND - ANXIETY - coffee - after
MIND - ANXIETY - company; when in
MIND - ANXIETY - conscience; anxiety of
MIND - ANXIETY - conversation; from

MIND ANVIETY asuch during
MIND - ANXIETY - cough - during
MIND - ANXIETY - cough - from
MIND - ANXIETY - cough - whooping cough - during
MIND - ANXIETY - crowd; in a
MIND - ANXIETY - dark; in
MIND - ANXIETY - fever - during
MIND - ANXIETY - future, about
MIND - ANXIETY - motion - agg.
MIND - ANXIETY - noise, from
MIND - ANXIETY - noise, from - water; of rushing
MIND - ANXIETY - perspiration - during
MIND - ANXIETY - riding, while
MIND - ANXIETY - riding, while - driving himself; when
MIND - ANXIETY - salvation, about
MIND - ANXIETY - sleep - during
MIND - ANXIETY - speaking, when
MIND - ANXIETY - stool - during
MIND - ANXIETY - strangers, in the presence of
MIND - ANXIETY - tunnel
MIND - ANXIETY - tunnel - train is in a tunnel; when the
MIND - ANXIETY - waking, on
MIND - DEATH - desires
MIND - DEATH - presentiment of
MIND - DEATH - thoughts of
MIND - DELUSIONS (= imaginations)
MIND - DELUSIONS - activity, with
MIND - DELUSIONS - alone, being
MIND - DELUSIONS - alone, being - always alone; she is
MIND - DELUSIONS - alone, being - wilderness; alone in a
MIND - DELUSIONS - angels, seeing
MIND - DELUSIONS - animals
MIND - DELUSIONS - animals - bed - on
MIND - DELUSIONS - animals - black animals; seeing
MIND - <b>DELUSIONS</b> - animals - black animals; seeing - walls and furniture; seeing black animals on
MIND - DELUSIONS - animals - corners; coming out of
MIND - DELUSIONS - animals - creeping
MIND - DELUSIONS - animals - creeping - in her
MIND - DELUSIONS - animals - devoured by - being
MIND - DELUSIONS - animals - frightful
MIND - DELUSIONS - animals - jumping - out of the ground
MIND - DELUSIONS - animals - persons are animals
MIND - <b>DELUSIONS</b> - animals - persons are animals - rats, mice, insects etc.
MIND - DELUSIONS - animals - starting up
MIND - DELUSIONS - assembled things, swarms, crowds etc
MIND - DELUSIONS - beautiful
MIND - DELUSIONS - beautiful - she is beautiful and wants to be
MIND - DELUSIONS - bed - creases; bed is full of
MIND - DELUSIONS - bed - drawn from under her
MIND - DELUSIONS - bed - falling - on her
MIND - DELUSIONS - bed - someone - in the bed; as if someone is
MIND - <b>DELUSIONS</b> - bed - someone - in the bed; as if someone is - with him
MIND - <b>DELUSIONS</b> - bed - touch the bed when lying; as if she did not
MIND - DELUSIONS - beetles, worms etc.
MIND - DELUSIONS - bitten, will be
MIND - DELUSIONS - black - objects and people, sees
MIND - DELUSIONS - blind; he is

MIND - DELUSIONS - body - brittle, is MIND - **DELUSIONS** - body - cut through; he is MIND - DELUSIONS - body - cut through; he is - two; in MIND - DELUSIONS - body - divided, is MIND - DELUSIONS - body - parts - absent; parts of body are MIND - DELUSIONS - body - scattered about; body was MIND - DELUSIONS - body - state of his body, to the erroneous MIND - DELUSIONS - bugs and cockroaches; of MIND - DELUSIONS - business - ordinary, they are pursuing MIND - DELUSIONS - calls - someone calls MIND - DELUSIONS - catches - imaginary appearance; at MIND - DELUSIONS - catches - people, at MIND - DELUSIONS - cats - sees MIND - DELUSIONS - changed; everything is MIND - DELUSIONS - churchyard - dancing in, he is MIND - DELUSIONS - churchvard - visits a MIND - DELUSIONS - cockroaches swarmed about the room MIND - DELUSIONS - conversing; as if MIND - DELUSIONS - corners - people coming out of; sees MIND - DELUSIONS - corners - something coming out of the corner; sees MIND - DELUSIONS - creeping things; full of MIND - DELUSIONS - danger, impression of MIND - DELUSIONS - dark MIND - DELUSIONS - dead - he himself was MIND - DELUSIONS - dead - persons, sees MIND - DELUSIONS - delightful - she is or wants to be delightful MIND - DELUSIONS - devil MIND - DELUSIONS - devil - he is a devil MIND - DELUSIONS - devil - possessed of a devil MIND - DELUSIONS - devil - possessed of a devil - he is MIND - DELUSIONS - devil - sees MIND - DELUSIONS - die - about to die; one was MIND - DELUSIONS - disease - every disease; he has MIND - DELUSIONS - distinguished; he is MIND - DELUSIONS - divided - two parts; into MIND - DELUSIONS - divided - two parts; into - cut in two parts; or MIND - DELUSIONS - divine, being MIND - **DELUSIONS** - dogs - attack him MIND - DELUSIONS - dogs - attack him - gnawing flesh and bones MIND - DELUSIONS - dogs - barks at them to be understood; others are dogs, he MIND - DELUSIONS - dogs - biting his chest MIND - DELUSIONS - dogs - sees MIND - DELUSIONS - dogs - swarm about him MIND - DELUSIONS - doomed, being MIND - DELUSIONS - double - being MIND - DELUSIONS - drunk - is drunk: he MIND - DELUSIONS - dying - he is MIND - DELUSIONS - engaged - occupation; he is engaged in some MIND - DELUSIONS - engaged - occupation; he is engaged in some - ordinary occupation MIND - DELUSIONS - enlarged MIND - DELUSIONS - enlarged - body is MIND - DELUSIONS - enlarged - body is - parts of body MIND - DELUSIONS - enlarged - tall; he is very MIND - DELUSIONS - executioner; visions of an MIND - DELUSIONS - faces, sees MIND - DELUSIONS - faces, sees - elongated

MIND - DELUSIONS - faces, sees - ugly (= hideous) MIND - DELUSIONS - falling - clings and asks to be held MIND - DELUSIONS - falling - forward - is falling forward; she MIND - DELUSIONS - falling - he is MIND - DELUSIONS - falling - seat; he would fall from a MIND - DELUSIONS - falling - things will be MIND - DELUSIONS - fancy, illusions of MIND - DELUSIONS - fancy, illusions of - heat, during MIND - DELUSIONS - fancy, illusions of - sleep - during MIND - DELUSIONS - fighting; people are MIND - **DELUSIONS** - figures - seeing figures MIND - DELUSIONS - figures - seeing figures - corners; coming out of MIND - **DELUSIONS** - figures - seeing figures - strange (= grimaces) MIND - DELUSIONS - fire MIND - DELUSIONS - fire - balls of fire were rolling over bedclothes MIND - DELUSIONS - fire - house, on MIND - DELUSIONS - fire - room is on MIND - DELUSIONS - fire - visions of MIND - DELUSIONS - fishes, flies, etc.; sees MIND - DELUSIONS - flight from objects MIND - DELUSIONS - floating MIND - DELUSIONS - floating - bed - suspended in bed MIND - DELUSIONS - floating - bed - swimming in bed MIND - DELUSIONS - forsaken; is MIND - DELUSIONS - fowls, sees MIND - DELUSIONS - friend - never seen his friends; he had - walking; after MIND - **DELUSIONS** - fright - as if in a fright MIND - DELUSIONS - God - communication with God; he is in MIND - DELUSIONS - God - he is God, then he is the devil MIND - DELUSIONS - grave, he is in his MIND - DELUSIONS - great person, is a MIND - DELUSIONS - grimaces, sees MIND - DELUSIONS - grow - larger and longer; he grew MIND - DELUSIONS - hat is a pair of trousers which he tries to put on MIND - DELUSIONS - head - disease will break out of head MIND - DELUSIONS - hearing - illusions of MIND - DELUSIONS - hearing - mania; in MIND - DELUSIONS - honest - not honest; is MIND - DELUSIONS - horses MIND - DELUSIONS - horses - riding a horse MIND - DELUSIONS - house - people; house is full of MIND - DELUSIONS - house - surrounded; house is MIND - DELUSIONS - identity - errors of personal identity MIND - DELUSIONS - images, phantoms; sees MIND - DELUSIONS - images, phantoms; sees - black MIND - DELUSIONS - images, phantoms; sees - dark, in the MIND - DELUSIONS - images, phantoms; sees - frightful MIND - DELUSIONS - images, phantoms; sees - rising out of the earth MIND - DELUSIONS - images, phantoms; sees - side; at his MIND - DELUSIONS - inanimate objects are persons MIND - DELUSIONS - inconsolable; being MIND - DELUSIONS - influence; one is under a powerful MIND - DELUSIONS - injury - about to receive injury; is MIND - DELUSIONS - injury - being injured; is MIND - DELUSIONS - insects, sees MIND - DELUSIONS - jealousy - lovers concealed behind stove; wife has

MIND - DELUSIONS - jealousy - with MIND - **DELUSIONS** - joy - nothing could give her any joy MIND - DELUSIONS - large - he himself seems too MIND - DELUSIONS - large - parts of body seem too large MIND - DELUSIONS - lascivious MIND - DELUSIONS - laughter, with MIND - DELUSIONS - legs - cut off; legs are MIND - DELUSIONS - legs - three legs; has MIND - **DELUSIONS** - light [= low weight] - is light; he (= incorporeal) MIND - DELUSIONS - limbs - no limbs; she had MIND - DELUSIONS - limbs - separated; limbs are MIND - DELUSIONS - loguacity, with MIND - DELUSIONS - lying - crosswise MIND - **DELUSIONS** - Mary; Virgin - she is MIND - DELUSIONS - mice - sees MIND - DELUSIONS - murdered - being murdered; he is MIND - DELUSIONS - murdered - being murdered; he is - roasted and eaten; he was murdered MIND - DELUSIONS - murdered - will be murdered; he MIND - DELUSIONS - murdering; he is - struck friends who came to help him MIND - DELUSIONS - music - thinks he hears MIND - DELUSIONS - naked, he is MIND - DELUSIONS - neglected - he or she is neglected MIND - DELUSIONS - neglected - he or she is neglected - husband; by her MIND - **DELUSIONS** - new; everything is MIND - DELUSIONS - objects; about - bright objects; delusions from MIND - DELUSIONS - objects; about - flight away from objects MIND - DELUSIONS - objects; about - persons; are MIND - DELUSIONS - obscene MIND - DELUSIONS - people - conversing with absent people MIND - DELUSIONS - people - seeing people MIND - DELUSIONS - people - seeing people - seize them; a number of strangers and tries to MIND - DELUSIONS - persecuted - he is persecuted MIND - DELUSIONS - pleasing delusions MIND - DELUSIONS - poisoned - he - has been MIND - DELUSIONS - poor; he is MIND - DELUSIONS - position; she is not fitted for her MIND - DELUSIONS - possessed; being MIND - DELUSIONS - power - diseases; he had power over all MIND - DELUSIONS - proud MIND - DELUSIONS - pure; she is MIND - **DELUSIONS** - pursued; he was MIND - DELUSIONS - pursued; he was - enemies, by MIND - DELUSIONS - pursued; he was - ghosts, by MIND - DELUSIONS - rabbits, sees MIND - DELUSIONS - railway train - ear; there is a train or car in his MIND - DELUSIONS - rats, sees MIND - **DELUSIONS** - religious MIND - DELUSIONS - scream - with screaming MIND - DELUSIONS - seeing - cannot see; he MIND - DELUSIONS - seeing - herself MIND - DELUSIONS - seeking - something; he is seeking MIND - DELUSIONS - separated - body - extremities are separated from the body MIND - DELUSIONS - separated - body - feet are separated from the body MIND - DELUSIONS - separated - body - hand is separated from the body MIND - DELUSIONS - sick - being MIND - DELUSIONS - side - alive on one and buried on the other; he is

MIND - DELUSIONS - sinned; one has MIND - DELUSIONS - sinned; one has - day of grace; sinned away his MIND - DELUSIONS - small - things - appear small; things MIND - DELUSIONS - small - things - appear small; things - he were very large; and MIND - DELUSIONS - small - things - grow smaller; things MIND - DELUSIONS - snakes MIND - DELUSIONS - snakes - in and around her MIND - DELUSIONS - specters, ghosts, spirits MIND - DELUSIONS - specters, ghosts, spirits - closing eyes, on MIND - **DELUSIONS** - specters, ghosts, spirits - pursued by, is MIND - DELUSIONS - specters, ghosts, spirits - seeing MIND - DELUSIONS - spinning, is MIND - DELUSIONS - statue MIND - DELUSIONS - statue - admired; poses as a statue to be MIND - **DELUSIONS** - strange - everything is MIND - DELUSIONS - strange - familiar things seem strange MIND - **DELUSIONS** - strange - objects seem MIND - DELUSIONS - strangers - friends appears as strangers MIND - DELUSIONS - strangers - seeing MIND - DELUSIONS - suffocated; she will be MIND - **DELUSIONS** - talking - dead people; with MIND - DELUSIONS - talking - inanimate objects with names, but observes no one standing near him; to MIND - DELUSIONS - talking - spirits, with MIND - DELUSIONS - tall - he or she is tall MIND - DELUSIONS - touched; he is MIND - DELUSIONS - vertigo - having vertigo MIND - DELUSIONS - violent MIND - DELUSIONS - visions, has MIND - DELUSIONS - visions, has - daytime MIND - DELUSIONS - visions, has - night MIND - DELUSIONS - visions, has - closing the eyes, on MIND - DELUSIONS - visions, has - fantastic MIND - DELUSIONS - visions, has - horrible MIND - DELUSIONS - visions, has - horrible - beside him MIND - DELUSIONS - visions, has - horrible - dark, in the MIND - DELUSIONS - visions, has - monsters, of MIND - **DELUSIONS** - visions, has - sleep; during MIND - **DELUSIONS** - visions, has - sleep; during - restless MIND - DELUSIONS - vivid MIND - DELUSIONS - voices - hearing MIND - DELUSIONS - voices - hearing - dead people, of MIND - **DELUSIONS** - voices - hearing - distant MIND - DELUSIONS - walking - air - on air; walks MIND - DELUSIONS - walking - cannot walk, he MIND - DELUSIONS - weeping; with MIND - **DELUSIONS** - wheelwright; is a MIND - DELUSIONS - whistling, with MIND - DELUSIONS - wife - faithless; wife is MIND - DELUSIONS - wilderness; being in MIND - FEAR - dark; of MIND - FEAR - dark; of - children; in MIND - FEAR - death, of MIND - FEAR - death, of - abortion; in MIND - FORGETFUL MIND - FORGETFUL - morning MIND - LOVE - perversity; sexual

MIND - PAIN - during MIND - RESTLESSNESS MIND - RESTLESSNESS - night MIND - RESTLESSNESS - night - hiccough; with MIND - RESTLESSNESS - bed - go from one bed to another; wants to MIND - RESTLESSNESS - bed - tossing about in MIND - RESTLESSNESS - children, in MIND - RESTLESSNESS - feverish MIND - RESTLESSNESS - feverish - scarlet fever MIND - RESTLESSNESS - heat - during MIND - RESTLESSNESS - internal MIND - RESTLESSNESS - menses - during MIND - RESTLESSNESS - metrorrhagia, during MIND - RESTLESSNESS - perspiration - during MIND - RESTLESSNESS - sleepiness, with MIND - RESTLESSNESS - typhus fever; with MIND - SUICIDAL disposition MIND - SUICIDAL disposition - heat, during MIND - SUICIDAL disposition - intermittent fever, during MIND - SUICIDAL disposition - knife - with a knife MIND - SUICIDAL disposition - razor; with a MIND - SUICIDAL disposition - throwing - height; himself from a MIND - UNCONSCIOUSNESS MIND - UNCONSCIOUSNESS - alcoholic MIND - UNCONSCIOUSNESS - alone, when MIND - UNCONSCIOUSNESS - apoplexy, in MIND - UNCONSCIOUSNESS - chill - during MIND - UNCONSCIOUSNESS - dream, as in a MIND - UNCONSCIOUSNESS - eyes - fixed; with MIND - UNCONSCIOUSNESS - fever, during MIND - UNCONSCIOUSNESS - incomplete MIND - UNCONSCIOUSNESS - mental insensibility MIND - UNCONSCIOUSNESS - perspiration - during MIND - UNCONSCIOUSNESS - pregnancy, during MIND - UNCONSCIOUSNESS - remains fixed in one spot MIND - UNCONSCIOUSNESS - remains fixed in one spot - motionless like a statue MIND - UNCONSCIOUSNESS - semi-consciousness MIND - UNCONSCIOUSNESS - sexual excitement, with MIND - UNCONSCIOUSNESS - sitting, while MIND - UNCONSCIOUSNESS - sitting, while - upright MIND - UNCONSCIOUSNESS - starts up in a wild manner, but could not keep the eyes open MIND - UNCONSCIOUSNESS - twitching of limbs, with MIND - UNCONSCIOUSNESS - vertigo, during MIND - UNCONSCIOUSNESS - waking - after

From the above table it is evident that *Datura stramonium* exhibits general symptoms such as haemorrhage and intoxication. Mental symptoms exhibited included anxiety and delusions ranging from being alone to being in the wilderness. Mental symptoms such as fear, forgetfulness, restlessness, suicidal disposition and unconsciousness also featured in table 10.

 Table 11: General and mental symptoms with corresponding rubrics and sub rubrics from the remedy *Hyoscyamus niger*

GENERALS - CONVULSIONS
GENERALS - CONVULSIONS - night
GENERALS - CONVULSIONS - accompanied by - scarlatina
GENERALS - CONVULSIONS - begin in - Face
GENERALS - CONVULSIONS - children; in
GENERALS - CONVULSIONS - children; in - infants, in
GENERALS - CONVULSIONS - chill - during
GENERALS - CONVULSIONS - clonic
GENERALS - CONVULSIONS - clonic - chill; during
GENERALS - CONVULSIONS - clonic - fever; during
GENERALS - CONVULSIONS - clonic - perspiration; during1
GENERALS - CONVULSIONS - coldness; with - Body; of
GENERALS - CONVULSIONS - consciousness - with
GENERALS - CONVULSIONS - consciousness - without
GENERALS - CONVULSIONS - cough - during - agg.
GENERALS - CONVULSIONS - delirium tremens; in
GENERALS - CONVULSIONS - delivery - after
GENERALS - CONVULSIONS - delivery - during
GENERALS - CONVULSIONS - dentition; during
GENERALS - CONVULSIONS - drinking - after - agg.
GENERALS - CONVULSIONS - drugs; after
GENERALS - CONVULSIONS - drunkards; in
GENERALS - CONVULSIONS - eating - after - agg.
GENERALS - CONVULSIONS - epileptic
GENERALS - CONVULSIONS - epileptic - after epileptic convulsions; complaints - paralysis
GENERALS - CONVULSIONS - epileptic - aura - auditory complaints
GENERALS - CONVULSIONS - epileptic - aura - ravenous appetite
GENERALS - CONVULSIONS - epileptic - aura - vertigo
GENERALS - CONVULSIONS - epileptic - aura - visual complaints
GENERALS - CONVULSIONS - epileptic - aura - Ear noises
GENERALS - CONVULSIONS - epileptic - aura - Eyes - sparks before the eyes
GENERALS - CONVULSIONS - epileptic - aura - Stomach, in
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - enuresis
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - froth, foam from
mouth
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - involuntary
discharges - urination
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - vertigo
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Eyes - protruding
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Face - bluish
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Face - purple
GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Teeth, grinding of
GENERALS - CONVULSIONS - epileptic - fright; from
GENERALS - CONVULSIONS - epileptic - hysterical
GENERALS - CONVULSIONS - epileptic - psychomotor seizures
GENERALS - CONVULSIONS - epileptic - violent
GENERALS - CONVULSIONS - epileptiform
GENERALS - CONVULSIONS - eruptions - suppressed eruptions; after
GENERALS - CONVULSIONS - excitement agg.
GENERALS - CONVULSIONS - falling; with

GENERALS - CONVULSIONS - fear - from GENERALS - CONVULSIONS - fright agg. GENERALS - CONVULSIONS - grief; from GENERALS - CONVULSIONS - heat; during GENERALS - CONVULSIONS - hemorrhage - with GENERALS - CONVULSIONS - hysterical GENERALS - CONVULSIONS - hysterical - menses; before GENERALS - CONVULSIONS - labor; during GENERALS - CONVULSIONS - liquids agg. GENERALS - CONVULSIONS - love; from disappointed GENERALS - CONVULSIONS - menses - before - agg GENERALS - CONVULSIONS - menses - during - agg. GENERALS - CONVULSIONS - menses - during - beginning of menses - agg. GENERALS - CONVULSIONS - metrorrhagia; during GENERALS - CONVULSIONS - paralysis - with GENERALS - CONVULSIONS - pregnancy agg.; during (= eclampsia) GENERALS - CONVULSIONS - puerperal GENERALS - CONVULSIONS - puerperal - hemorrhage; with GENERALS - CONVULSIONS - puerperal - shrieking, with GENERALS - CONVULSIONS - shrieking, with GENERALS - CONVULSIONS - sleep - deep sleep after convulsions GENERALS - CONVULSIONS - sleep - during - agg. GENERALS - CONVULSIONS - sleep - sleeplessness; with or after GENERALS - CONVULSIONS - stool - during - agg. GENERALS - CONVULSIONS - tetanic rigidity GENERALS - CONVULSIONS - tonic GENERALS - CONVULSIONS - tonic - fever; during GENERALS - CONVULSIONS - urination - during - agg. GENERALS - CONVULSIONS - urination - involuntary GENERALS - CONVULSIONS - vertigo; after GENERALS - CONVULSIONS - vomiting - during GENERALS - CONVULSIONS - worms; from GENERALS - CONVULSIONS - Internally **GENERALS - CONVULSIVE** movements GENERALS - RESTLESSNESS GENERALS - RESTLESSNESS - chill; during GENERALS - RESTLESSNESS - fever - during - agg. GENERALS - RESTLESSNESS - sleep; during **GENERALS - TWITCHING** GENERALS - TWITCHING - chill; during GENERALS - TWITCHING - convulsions - during GENERALS - TWITCHING - fever; during GENERALS - TWITCHING - here and there GENERALS - TWITCHING - menses - during - agg. GENERALS - TWITCHING - perspiration; during GENERALS - TWITCHING - sleep - during - agg. GENERALS - **TWITCHING** - subsultus tendinum GENERALS - TWITCHING - typhoid fever; during GENERALS - TWITCHING - waking; on **GENERALS - TWITCHING - Muscles** MIND - CONFUSION of mind MIND - CONFUSION of mind - morning MIND - CONFUSION of mind - afternoon MIND - CONFUSION of mind - air, in open MIND - CONFUSION of mind - chill - during MIND - CONFUSION of mind - eating - after

MIND - CONFUSION of mind - heat, during MIND - CONFUSION of mind - intoxicated - as if MIND - CONFUSION of mind - mixes subjective and objective MIND - DELIRIUM - epilepsy - during MIND - DELIRIUM - restless MIND - DELUSIONS - poisoned - he - about to be poisoned; he is MIND - DELUSIONS - poisoned - he - has been MIND - DELUSIONS - poisoned - medicine; being poisoned by MIND - DEMENTIA MIND - DEMENTIA – paretic MIND - EXCITEMENT MIND - EXCITEMENT - night MIND - EXCITEMENT - agg. MIND - EXCITEMENT - menses - during MIND - EXCITEMENT - nervous MIND - EXHILARATION MIND - EXHILARATION - children; in MIND - FEAR - poisoned - being poisoned; fear of MIND - FEAR - poisoned - has been MIND - GESTURES, makes - convulsive MIND - GESTURES, makes - convulsive - sleep, during MIND- HYSTERIA MIND - HYSTERIA - haemorrhage - with MIND - HYSTERIA - hypochondriasis; with MIND - **INSANITY** (= madness) MIND - INSANITY - alternating with - physical symptoms MIND - INSANITY - alternating with - stupor MIND - INSANITY - busy MIND - INSANITY - cheerful, gay MIND - INSANITY - chill; during MIND - INSANITY - convulsions, with MIND - INSANITY - crazy person; behaves like a MIND - INSANITY - dancing, with MIND - INSANITY - drunkards, in MIND - INSANITY - erotic MIND - INSANITY - erotic - jealousy, with MIND - INSANITY - foolish, ridiculous MIND - INSANITY - heat; with MIND - **INSANITY** - immobile as a statue MIND - INSANITY - insensibility; with general MIND - INSANITY - lamenting, moaning; only MIND - INSANITY - lascivious MIND - INSANITY - laughing, with MIND - INSANITY - loquacious MIND - INSANITY - malicious (= malignant) MIND - INSANITY - masturbation, from MIND - INSANITY - megalomania MIND - **INSANITY** - melancholy MIND - INSANITY - menses - during MIND - INSANITY - mental exertion; from MIND - INSANITY - paralysis, with MIND - INSANITY - pregnancy, in MIND - INSANITY - puerperal MIND - INSANITY - quarrelsome MIND - INSANITY - rage MIND - INSANITY - religious

MIND INSANITY restlessness with
MIND - INSANITY - restlessness, with
MIND - INSANITY - sadness; with
MIND - INSANITY - sleeplessness, with MIND - INSANITY - strength; with increased
MIND - <b>INSANITY</b> - stupidity; with MIND - <b>INSANITY</b> - suicidal disposition, with
MIND - <b>INSANTY</b> - taciturnity; with
MIND - INSANITY - talking; with wild
MIND - INSANITY - tapping about the room
MIND - <b>INSANITY</b> - travel, with desire to
MIND - INSANITY - varicose veins - after
MIND - INSANITY - violent
MIND - INSANITY - wantonness, with
MIND - INSANITY - wedding; preparing for
MIND - MANIA
MIND - MANIA - alternating with - depression
MIND - MANIA - alternating with - frenzy
MIND - MANIA - demonic
MIND - MANIA - fortune; from reverse of
MIND - MANIA - lascivious
MIND - MANIA - puerperal
MIND - MANIA - rage, with
MIND - MANIA - religious
MIND - MANIA - sexual mania
MIND - MANIA - singing, with
MIND - <b>MANIA</b> - sunstroke, after
MIND - MANIA - typhus, in
MIND - MANIA - vexation; after
MIND - MANIA - violence, with deeds of
MIND - RESTLESSNESS
MIND - RESTLESSNESS - morning
MIND - RESTLESSNESS - afternoon
MIND - RESTLESSNESS - night
MIND - RESTLESSNESS - bed - driving out of
MIND - RESTLESSNESS - bed - go from one bed to another; wants to
MIND - RESTLESSNESS - bed - tossing about in
MIND - RESTLESSNESS - busy
MIND - RESTLESSNESS - children, in
MIND - RESTLESSNESS - convulsions - before
MIND - RESTLESSNESS - driving about
MIND - RESTLESSNESS - feverish
MIND - RESTLESSNESS - feverish - scarlet fever
MIND - <b>RESTLESSNESS</b> - menses - during
MIND - RESTLESSNESS - metrorrhagia, during
MIND - RESTLESSNESS - move - must constantly
MIND - RESTLESSNESS - perspiration - during
MIND - RESTLESSNESS - typhus fever; with
MIND - SHRIEKING - sleep, during
MIND - SLEEPLESSNESS agg.
MIND - TALKING - <b>sleep</b> , in
MIND - TALKING - <b>sleep</b> , in - confess themselves aloud; they

From the above table it is evident that *Hyoscyamus niger* exhibits general symptoms such as convulsions ranging from colonic to tonic. General symptoms such as restlessness and twitching were also present. Mental symptoms such as confusion, dementia, exhilaration, hysteria, insanity, mania and restlessness also featured in table 11.

#### Table 12: General and mental symptoms with corresponding rubrics and sub rubrics for the remedy *Capsicum annuum*

GENERALS - ABSCESSES
GENERALS - ABSCESSES - deep
GENERALS - ABSCESSES - deep GENERALS - ABSCESSES - pus - yellow
GENERALS - ABSCESSES - pus - yellow GENERALS - ABSCESSES - Bones, of
GENERALS - BURNS
GENERALS - CONVULSIONS - painless
GENERALS - CONVOLSIONS - painless GENERALS - CONVULSIONS - tonic
GENERALS - CONVOLSIONS - Internally
GENERALS - INFLAMMATION - Externally
GENERALS - INFLAMMATION - Glands; of
GENERALS - INFLAMMATION - Internally
GENERALS - INFLAMMATION - Joints; of - deformans; arthritis
GENERALS - INFLAMMATION - Mucous membranes
GENERALS - INJURIES - dislocation (= luxation)
GENERALS - INJURIES - dislocation (= location) GENERALS - ITCHING - Internally
GENERALS - NECROSIS - Bone
GENERALS - PAIN
GENERALS - PAIN - biting pain
GENERALS - PAIN - boring pain
GENERALS - PAIN - burning
GENERALS - PAIN - burning - stinging
GENERALS - PAIN - bursting pain
GENERALS - PAIN - compressed; as if forcefully
GENERALS - PAIN - cough agg.; during
GENERALS - PAIN - cough agg.; during - bursting pain
GENERALS - PAIN - cough agg.; during - stitching pain
GENERALS - <b>PAIN</b> - digging pain (= burrowing, rooting sensation)
GENERALS - PAIN - drawing pain
GENERALS - PAIN - drawing pain - downward
GENERALS - PAIN - gouty
GENERALS - PAIN - gouty - Joints
GENERALS - PAIN - line; in a
GENERALS - PAIN - neuralgic
GENERALS - PAIN - paralyzed; as if
GENERALS - PAIN - pierced; as if
GENERALS - PAIN - pinching pain
GENERALS - PAIN - pressing pain - together
GENERALS - PAIN - pressing pain - within outward, from
GENERALS - PAIN - raw; as if
GENERALS - PAIN - sore (= bruised)
GENERALS - PAIN - stinging

GENERALS - PAIN - stitching pain - downward GENERALS - PAIN - stitching pain - inward GENERALS - PAIN - stitching pain - needles; as from GENERALS - PAIN - stitching pain - needles; as from - hot needles GENERALS - PAIN - tearing pain - downward GENERALS - PAIN - twisting pain GENERALS - PAIN - violent - tearing pain GENERALS - PAIN - wandering pain GENERALS - PAIN - extending to - Downward GENERALS - PAIN - Affected parts - cough agg.; during GENERALS - PAIN - Affected parts - cough agg.; during - pressing pain GENERALS - PAIN - Affected parts - cough agg.; during - stitching pain GENERALS - PAIN - Bones GENERALS - PAIN - Bones - tearing pain GENERALS - PAIN - External parts GENERALS - PAIN - External parts - dislocated; as if GENERALS - PAIN - Externally GENERALS - PAIN - Externally - burning GENERALS - PAIN - Externally - constricting GENERALS - PAIN - Externally - gnawing pain GENERALS - PAIN - Externally - jerking GENERALS - PAIN - Externally - pinching pain GENERALS - PAIN - Externally - pressing pain GENERALS - PAIN - Externally - sore GENERALS - PAIN - Externally - stitching pain GENERALS - PAIN - Externally - stitching pain - burning GENERALS - PAIN - Externally - tearing pain GENERALS - PAIN - Externally - ulcerative pain GENERALS - PAIN - Externally - warmth - amel. - heat amel. GENERALS - PAIN - Externally - warmth - amel. - heat amel. - burning GENERALS - PAIN - Glands GENERALS - PAIN - Glands - jerking GENERALS - PAIN - Glands - tearing pain **GENERALS - PAIN - Internally** GENERALS - PAIN - Internally - burning GENERALS - PAIN - Internally - constricting GENERALS - PAIN - Internally - cutting pain GENERALS - **PAIN** - Internally - pinching pain GENERALS - **PAIN** - Internally - pressing pain GENERALS - PAIN - Internally - sore GENERALS - PAIN - Internally - stitching pain GENERALS - PAIN - Internally - tearing pain GENERALS - PAIN - Internally - ulcerative pain **GENERALS - PAIN - Joints** GENERALS - PAIN - Joints - dislocated; as if GENERALS - PAIN - Joints - drawing pain GENERALS - PAIN - Joints - paralyzed; as if GENERALS - PAIN - Joints - stitching pain GENERALS - PAIN - Mucous membranes GENERALS - PAIN - Mucous membranes - burning GENERALS - **PAIN** - Muscles (= myalgia) GENERALS - PAIN - Muscles - aching GENERALS - PAIN - Muscles - cramping GENERALS - PAIN - Muscles - drawing pain GENERALS - PAIN - Muscles - fever; during GENERALS - PAIN - Muscles - fever; during - tearing pain

GENERALS - PAIN - Muscles - perspiration; during GENERALS - PAIN - Muscles - perspiration; during - tearing pain GENERALS - PAIN - Muscles - pressing pain GENERALS - PAIN - Muscles - stitching pain GENERALS - PAIN - Muscles - stitching pain - tearing GENERALS - PAIN - Muscles - tearing pain GENERALS - PAIN - Muscles - tearing pain - sticking pain GENERALS - PAIN - Parts - various parts of body; in GENERALS - PAIN - Parts - various parts of body; in - burning GENERALS - SENSITIVENESS - pain, to **GENERALS - TWITCHING GENERALS - TWITCHING - Glands** GENERALS - VARICOSE veins - itching MIND - DELIRIUM MIND - **DELIRIUM** - chill, during MIND - DELIRIUM - fever - during MIND - IRRITABILITY MIND - IRRITABILITY - chill, during MIND - IRRITABILITY - trifles, from MIND - IRRITABILITY - trifles, from - jocose, though MIND - IRRITABILITY - waking, on - amel.

From the table above it is evident that *Capsicum annuum* exhibits general symptoms such as abscesses, burns, convulsions and inflammation. The general symptom pain ranged from biting pain to tearing pain. The general symptom twitching also featured in the table. Mental symptoms featured in table 12 included delirium and irritability.

### Table 13: General and mental symptoms with corresponding rubrics and subrubrics from the remedy *Nicotiana Tabacum*

GENERALS - CONVULSIONS - morning
GENERALS - CONVULSIONS - alternating with - tonic cramps
GENERALS - CONVULSIONS - clonic
GENERALS - CONVULSIONS - clonic - alternating with tonic
GENERALS - CONVULSIONS - epileptic
GENERALS - CONVULSIONS - paralysis - with
GENERALS - CONVULSIONS - stool - during - agg.
GENERALS - CONVULSIONS - tetanic rigidity
GENERALS - FAINTNESS - perspiration - cold, with
GENERALS - FAINTNESS - vertigo; with
GENERALS - TREMBLING - Externally (= whole body)
GENERALS - TREMBLING - Externally - convulsive
GENERALS - <b>TREMBLING</b> - Externally - eating - after - agg.
GENERALS - TREMBLING - Externally - nausea; with
GENERALS - TREMBLING - Externally - nervous
GENERALS - TREMBLING - Externally - noise agg.
GENERALS - TWITCHING

GENERALS - TWITCHING - night GENERALS - WEAKNESS - morning GENERALS - WEAKNESS - morning - ideas at night; after copious flow of GENERALS - WEAKNESS - morning - waking; on GENERALS - WEAKNESS - forenoon GENERALS - WEAKNESS - evening GENERALS - WEAKNESS - night GENERALS - WEAKNESS - convulsions; after GENERALS - WEAKNESS - diarrhea - from **GENERALS - WEAKNESS - excessive** GENERALS - WEAKNESS - heat - from GENERALS - WEAKNESS - menopause; during GENERALS - WEAKNESS - menses - during - agg. GENERALS - WEAKNESS - motion - agg. GENERALS - WEAKNESS - nervous GENERALS - WEAKNESS - paralytic - sliding down in bed from a half sitting position GENERALS - WEAKNESS - stool - during - agg. GENERALS - WEAKNESS - sudden GENERALS - WEAKNESS - vertigo; with GENERALS - WEAKNESS - vomiting - with GENERALS - WEAKNESS - waking - on GENERALS - WEAKNESS - Joints GENERALS - WEAKNESS - Muscular MIND - ANXIETY MIND - ANXIETY - afternoon MIND - ANXIETY - afternoon - 16 h MIND - ANXIETY - evening MIND - ANXIETY - night MIND - ANXIETY - air; in open MIND - ANXIETY - alone; when MIND - ANXIETY - causeless MIND - ANXIETY - crowd; in a MIND - ANXIETY - fear; with MIND - ANXIETY - future, about MIND - ANXIETY - health; about MIND - ANXIETY - paroxysms, in MIND - ANXIETY - perspiration - cold, with MIND - ANXIETY - pressure; from - Chest; on MIND - ANXIETY - shuddering, with MIND - ANXIETY - stool - during MIND - ANXIETY - sudden MIND - ANXIETY - thinking about it, from MIND - ANXIETY - travelling; before MIND - ANXIETY - vomiting, on MIND - ANXIETY - waking, on MIND - ANXIETY - walking - agg. MIND - ANXIETY - walking - air, in open MIND - ANXIETY - weeping amel. MIND - CONFUSION of mind MIND - CONFUSION of mind - dinner - after MIND - CONFUSION of mind - eating - after MIND - CONFUSION of mind - heat, during MIND - CONFUSION of mind - motion, from MIND - CONFUSION of mind - vomiting amel. MIND - EXCITEMENT MIND - IRRITABILITY

MIND - MEMORY - loss of memory MIND - MEMORY - weakness of memory MIND - MEMORY - weakness of memory - expressing oneself, for MIND - MEMORY - weakness of memory - orthography, for MIND - NAUSEA - after MIND - MEMORY - weakness of memory - proper names MIND - RESTLESSNESS MIND - RESTLESSNESS - afternoon MIND - RESTLESSNESS - afternoon MIND - RESTLESSNESS - night MIND - RESTLESSNESS - anxious MIND - RESTLESSNESS - anxious MIND - RESTLESSNESS - anxious - driving from place to place MIND - RESTLESSNESS - bed - in MIND - RESTLESSNESS - bed - tossing about in	
MIND - RESTLESSNESS - driving about	
MIND - RESTLESSNESS - headache, during	
MIND - RESTLESSNESS - noise; from	
MIND - SADNESS – anxious	

From the table above it is evident that *Nicotiana tabacum* exibits general symptoms such as convulsions ranging from clonic to tetanic rigidity. Other general symptoms evident included twitching, trembling and weakness. Mental symptoms featured in table 13 included anxiety, confusion, excitement, irritability and restlessness.

#### Table 14: General and mental symptoms with corresponding rubrics and sub rubrics from the remedy *Mandragora officinarum*

GENERALS - ANALGESIA
MIND - <b>DELIRIUM</b>
MIND - DELUSIONS (= imaginations)
MIND - DELUSIONS - devil
MIND - DELUSIONS - devil - possessed of a devil
MIND - DELUSIONS - possessed; being
MIND - EUPHORIA
MIND - EUPHORIA - alternating with - sadness
MIND - EXCITEMENT
MIND - RESTLESSNESS
MIND - RESTLESSNESS - weakness - during

From the table above it is evident that *Mandragora officinarum* exhibited the general symptom analgesia. Mental symptoms featured in table 14 included delirium, delusions, euphoria, excitement and restlessness.

 
 Table 15: General and mental symptoms with corresponding rubrics and sub rubrics from the remedy Solanum nigrum

GENERALS - CONVULSIONS
GENERALS - CONVULSIONS - delivery - during
GENERALS - CONVULSIONS - dentition; during
GENERALS - CONVULSIONS - epileptic
GENERALS - CONVULSIONS - opisthotonos; with
GENERALS - CONVULSIONS - puerperal
GENERALS - CONVULSIONS - tetanic rigidity
GENERALS - RESTLESSNESS - convulsive
GENERALS - RESTLESSNESS - violent
GENERALS - TWITCHING
MIND - <b>ANXIETY</b> - beside oneself from <b>anxiety</b> ; being
MIND - ANXIETY - waking, on
MIND - COMA
MIND - COMA - fever - during
MIND - DELIRIUM
MIND - <b>DELIRIUM</b> - raging (= raving)
MIND - GESTURES, makes – convulsive
MIND - RESTLESSNESS
MIND - RESTLESSNESS - convulsive
MIND - UNCONSCIOUSNESS
MIND - UNCONSCIOUSNESS - apoplexy, in

From table 15 above it is evident that *Solanum nigrum* exhibits general symptoms such as convulsions, restlessness and twitching. The mental symptoms exhibited included anxiety, coma, delirium, restlessness and unconsciousness.

### 4.6) Analysis of keywords and synonyms of rubrics and sub rubrics

From the data presented in the preceding tables, it was possible to extract keywords and synonyms related to the individual members of the *Solanaceae* family from the mental and general rubrics *Solanaceae* family. A summary of these keywords are presented in table 16.

### Table 16 : Keywords and synonyms from general and mental rubrics and sub rubrics of remedies in the study

Atropa	Solanum	Datura	Hyoscyamus	Capsicum	Nicotiana	Mandragora	Solanum
belladonna	dulcamara	stramonium	Niger	annuum	tabacum	officinarum	nigrum
Affectionate Coma Confusion Convulsions Delusions Doubtful Dryness Evil Excitement Exhilaration Jerking Narcotics Poisoned Red Redness Restlessness Sleeplessness Soldiers Twitching Violent	Absentminded Cancerous Catarrh Cough Death Delusions Inflammation Pain Restlessness Rheumatic Sadness Tumours vertigo	Abusive Affectionate Anxiety Dark Death Delusions Forgetful Intoxication Love Murdered Murdering Red Restlessness Suicidal Unconsciousness	Confusion Convulsions Dementia Epilepsy Excitement Exhilaration Hysteria Hysterical Insanity Manic Poisoned Restlessness Sleep Twitching	Abscess Burning Burns Delirium Inflammation Injuries Irritability Itching Necrosis Pain Twitching Ulcerative	Anxiety Anxiousness Confusion Convulsions Excitement Irritability Perspiration Restlessness Trembling Twitching Vertigo Weakness	Analgesia Delirium Delusions Euphoria Excitement Restlessness	Anxiety Coma Convulsions Delirium Restlessness Twitching Unconsciousness

## 4.7) Hypothesis 1: Commonalities exist between the general and mental symptoms of individual remedies belonging to the Solanaceae family and their natural histories

In an attempt to further investigate the relationships between the natural history of the *Solanaceae* sample group and the general and mental symptoms, the relative symptoms related to each keyword from the natural history of the sample group were carefully analysed and are explained and tabulated below:

### 4.7.1) Atropa belladonna

In the remedy *Atropa belladonna* both general and mental symptoms were found to be of significant importance in relation to its natural history. The general symptoms found to be of significance to the natural history included the following symptoms in relation to their rubrics in general although most of their sub rubrics were unrelated to the keywords or synonyms relating to the natural history of *Atropa belladonna*.

#### GENERALS-CONVULSIONS GENERALS-JERKING GENERALS-NARCOTICS GENERALS-TWITCHING

The following general symptoms listed below contained sub rubrics in their relation to keywords and synonyms relating to the natural history of *Atropa belladonna*.

GENERALS-HEMORRAGE-blood-bright **red** GENERALS-MUCOUS MEMBRANES; complaints of-discoloration of-**red** GENERALS-MUCOUS MEMBRANES; complaints of-discoloration of-redbright GENERALS-PARALYSIS-one side-**convulsions**-after GENERALS-PARALYSIS-one side-**convulsions**-Well side: of the

Of more significance according to the researcher were general symptoms containing more than one keyword or synonym from the natural history. Symptoms containing more than one keyword or synonym from the natural history in their rubrics and sub rubrics were thought to be of more significance to the researcher as they related more specifically to the symptom. The following general symptoms contained more than one keyword or synonym from the natural history of *Atropa belladonna*.

GENERALS-CONVULSIONS-epileptic-during epileptic convulsions; complaints- face-red GENERALS-CONVULSIONS-excitement agg GENERALS-CONVULSIONS-sleep-sleeplessness; with or after GENERALS-CONVULSIONS-violent GENERALS-JERKING-convulsions, as in

Mental symptoms found to be of significance in relation to *Atropa belladonna* included the following symptoms listed below. As in the general symptoms most of the sub rubrics belonging to the symptoms were unrelated to keywords from the natural history of *Atropa belladonna*.

MIND-AFFECTIONATE MIND-COMA MIND-CONFUSION of mind MIND-DELUSIONS MIND- DOUBTFUL MIND-EXITEMENT MIND-EXHILARATION MIND- RESTLESSNESS MIND-VIOLENT

The following mental symptoms listed below contained sub rubrics in relation to their natural history.

MIND-DELIRIUM -convulsions-after MIND-DELIRIUM -convulsions-during MIND-FEAR-evil; fear of MIND-FEAR-poisoned-being poisoned; fear of

Mental symptoms containing more than one keyword or synonym per symptom and of more significance according to the researcher included the following mental symptoms included the following:

MIND - COMA - convulsions; with MIND - DELUSIONS - devil MIND - DELUSIONS - devil - sees MIND - DELUSIONS - devil - taken by the devil; he will be MIND - DELUSIONS - flying MIND - DELUSIONS - flying - must fly; as if he MIND - DELUSIONS - soldiers - seeing
MIND - DELUSIONS - spectres, ghosts, spirits
MIND - DELUSIONS - spectres, ghosts, spirits - closing eyes, on
MIND - DELUSIONS - spectres, ghosts, spirits - fire, in
MIND - DELUSIONS - spectres, ghosts, spirits - seeing
MIND - DELUSIONS - talking - spirits, with

The correlation between the natural history of *Atropa belladonna* and the homoeopathic mental and general symptoms can thus be summarised as illustrated in table 17.

### Table 17: Keywords relating to the natural history of *Atropa belladonna* and keywords of general and mental rubrics of *Atropa belladonna*

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Devil	Devil
Spasms	Convulsions, jerking, twitching
Hallucinations	Delusions
Aggression	Violent
Euphoria	Exhilaration
Confusion	Confusion
Insomnia	Sleeplessness
Red	Redness
Warriors	Soldiers

The results thus conclude that relationships between the natural history of *Atropa belladonna* and its general and mental symptoms do exist in terms of keywords and synonyms extracted from the natural history of the plant, thus proving the hypothesis as applicable to *Atropa belladonna*.

### 4.7.2 Solanum dulcamara

As in the remedy *Atropa belladonna, solanum dulcamara* also exhibited significant relationships between its general and mental symptoms and its natural history. The general symptoms found to be of significance to the natural history included the following symptoms in relation to their rubrics in general although most of their sub rubrics were unrelated to the keywords or synonyms from the natural history of *Solanum dulcamara*.

GENERALS - CANCEROUS GENERALS - CATARRH GENERALS - INFLAMMATION GENERALS - PAIN GENERALS - TUMOURS

General symptoms containing only sub rubrics related to the keywords and synonyms of the natural history of *Solanum dulcamara* did not feature in the results of the study. However general symptoms containing more than one keyword or synonym and were of more significance to the researcher did feature and are listed below.

GENERALS - **PAIN** - **rheumatic** GENERALS - **PAIN** - **rheumatic** - motion - amel GENERALS - **PAIN** - **rheumatic** - weather - cold - wet - agg GENERALS - **PAIN** - **rheumatic** - muscles

The following mental symptoms were found to be of significance to the natural history of *Solanum dulcamara*, although their related sub rubrics contained no keywords or synonyms related to the natural history of *Solanum dulcamara*.

MIND - **ABSENTMINDED** MIND - **DEATH** MIND - **DELUSIONS** MIND - **FORGETFUL** MIND - **PAIN** MIND - **RESLESSNESS** MIND - **SADNESS** 

The following symptoms contained keywords or synonyms related to the natural history of *solanum dulcamara* in their sub rubrics and are as follows:

### MIND - STUPERFICATION - vertigo - during MIND - WEEPING - delusions, after

The correlation between the natural history of *Solanum dulcamara* and the homoeopathic mental and general symptoms can thus be summarised as illustrated in table 18.

Table 18: Keywords relating to the natural history of *Solanum dulcamara* and keywords of rubrics of *Solanum dulcamara* 

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Rheumatic	Rheumatic
Tumors	Tumors
Dizziness	Vertigo
Forgetting	Absentminded
Depression	Sadness
Hallucinations	Delusions

Symptoms containing more than one keyword or synonym relating to the natural history of *Solanum dulcamara* were not found. The results however do indicate a relationship of the natural history of *Solanum dulcamara* to its general and mental symptoms. Thus proving the hypothesis as applicable to *Solanum dulcamara*.

### <u>4.7.3 Datura stramonium</u>

In this remedy only two general symptoms were found to be related to the natural history of Datura *stramonium* through keywords and synonyms relating to its natural history. The two symptoms are listed below:

GENERALS - HEMORRHAGE - blood - bright **red** GENERALS - **INTOXICATION**, after

Mental symptoms however were well represented in terms of their relationship between the remedies natural history. The following mental symptoms were found to be of significance in the results of the study in relation the remedies natural history. However most sub rubrics belonging to mental symptoms were unrelated to keywords and synonyms relating to the natural history of *Datura stramonium*.

- MIND ABUSIVE MIND - AFFECTIONATE MIND - ANXIETY MIND - DEATH MIND - DELUSIONS MIND - FORGETFUL MIND - LOVE MIND - PAIN MIND - RESTLESSNESS MIND - SUICIDAL disposition
- MIND UNCONCIOUSNESS

The symptom MIND - AILMENTS FROM - **love**; disappointed, was the only symptom that contained a keyword or synonym related to a sub rubric.

Symptoms containing more than one keyword or synonym are listed below and are more significant in relation to the natural history of *Datura stramonium* according to the researcher.

#### MIND - **ANXIETY** - **dark**;in MIND - DELUSIONS - **murdered** - being **murdered**;he is MIND - **DELUSIONS** - **murdered** - being **murdered**;he is - roasted and eaten;he was **murdered** MIND – **DELUSIONS** - **murdering**;he is - struck friends who came to help him

The correlation between the natural history of Datura stramonium and the homoeopathic mental and general symptoms can thus be summarised as illustrated in table 19.

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Reddening	Red
Intoxicant	Intoxication
Hallucinations	Delusions
Love	Love
Suicide	Suicidal
Murder	Murdered, Murdering
Anxious	Anxiety
Death	Death
Darkness	Dark
Amnesia	Forgetful

### Table 19: Keywords relating to the natural history of Datura stramonium and keywords of rubrics of Datura stramonium

From the results it can therefore be seen that mental symptoms featured more predominantly in relation to the remedies natural history. As a result of this it can be said that a relationship between the remedies mental symptoms was established between its natural history more than general symptoms pertaining to the remedy *Datura stramonium*, thus proving the hypothesis as applicable to *Datura stramonium*.

### <u>4.7.4 Hyoscyamus niger</u>

In the remedy *Hyoscyamus niger* both general and mental symptoms were found to be of significant importance in relation to its natural history. The general symptoms found to be of significance to the natural history included the following symptoms in relation to their rubrics in general. Once again, as in other remedies in the study most of their sub rubrics were unrelated to the keywords or synonyms relating to the natural history of *Hyoscyamus niger*.

GENERALS - CONVULSIONS GENERALS - RESTLESSNESS GENERALS - TWITCHING

General symptoms containing only sub rubrics in relation to keywords and synonyms relating to the natural history of *Hyoscyamus niger* were not found in the results. The following symptoms contained more than one keyword or synonym from the natural history in their rubrics and sub rubrics and were thought to be of more significance as they related more specifically to the symptom.

**GENERALS - CONVULSIONS - epileptic** GENERALS - CONVULSIONS - epileptic - after epileptic convulsions; complaints - paralysis GENERALS - CONVULSIONS - epileptic - aura - auditory complaints GENERALS - CONVULSIONS - epileptic - aura - ravenous appetite GENERALS - CONVULSIONS - epileptic - aura - vertigo GENERALS - CONVULSIONS - epileptic - aura - visual complaints GENERALS - CONVULSIONS - epileptic - aura - Ear noises GENERALS - CONVULSIONS - epileptic - aura - Eyes - sparks before the eves GENERALS - CONVULSIONS - epileptic - aura - Stomach, in GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - enuresis GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - froth, foam from mouth GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - involuntary discharges - urination GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - vertigo GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Eyes - protruding GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Face - bluish

GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Face - purple GENERALS - CONVULSIONS - epileptic - during epileptic convulsions; complaints - Teeth, grinding of GENERALS - CONVULSIONS - epileptic - fright; from GENERALS - CONVULSIONS - epileptic - hysterical GENERALS - CONVULSIONS - epileptic - psychomotor seizures GENERALS - CONVULSIONS - epileptic - violent GENERALS - CONVULSIONS - epileptic - violent GENERALS - CONVULSIONS - hysterical GENERALS - CONVULSIONS - hysterical GENERALS - CONVULSIONS - hysterical - menses; before GENERALS - CONVULSIONS - sleep - deep sleep after convulsions GENERALS - CONVULSIONS - sleep - during - agg. GENERALS - CONVULSIONS - sleep - sleeplessness; with or after GENERALS - RESTLESSNESS - sleep; during GENERALS - TWITCHING - sleep - during - agg

Mental symptoms found to be of significance in relation to *Hyoscyamus niger* included the following symptoms below. As in the general symptoms most of the sub rubrics belonging to the symptoms were unrelated to keywords from the natural history of *Hyoscyamus niger*.

- MIND CONFUSION of mind
- MIND DEMENTIA
- MIND EXITEMENT
- MIND EXHILARATION
- MIND HYSTERIA
- MIND INSANITY
- MIND MANIA
- MIND RESTLESSNESS
- MIND SLEEPLESSNESS

Mental symptoms containing sub rubrics in their relation to the natural history of

Hyoscyamus niger in terms of keywords and synonyms are listed below:

- MIND DELIRIUM epilepsy during
- MIND DELIRIUM restless
- MIND DELUSIONS poisoned he about to be poisoned; he is
- MIND DELUSIONS poisoned he has been
- MIND DELUSIONS **poisoned** medicine; being poisoned by
- MIND FEAR poisoned being poisoned; fear of
- MIND FEAR poisoned has been
- MIND GESTURES, makes convulsive
- MIND GESTURES, makes convulsive sleep, during
- MIND SHRIEKING sleep, during
- MIND TALKING sleep, in
- MIND TALKING sleep, in confess themselves aloud; they

Only one mental symptom of more significance according to the researcher and containing more than one keyword or synonym from the natural history of *Hyoscyamus niger was* found in the results. The symptom MIND-**INSANITY**-**convulsions** contained two keywords in the symptom.

The correlation between the natural history of Hyoscyamus niger and the homoeopathic mental and general symptoms can thus be summarised as illustrated in table 20.

### Table 20: Keywords relating to the natural history of Hyoscyamus niger andkeywords of rubrics of Hyoscyamus niger

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Seizures, Spasms	Convulsions
Mania	Manic
Poison	Poisoned
Dementia	Dementia
Sleep	Sleep
Epilepsy	Epilepsy
Euphoria	Excitement
Confusion	Confusion

From the symptoms discussed, it can be seen that mental symptoms were more relevant than general symptoms in relation to the natural history of *Hyoscyamus niger*. Due to this it can be said that only mental symptoms could be related to the natural history of *Hyoscyamus niger* as general symptoms were seen as less significant according to the methodology used by the researcher in the study, thus proving the hypothesis as applicable to *Hyoscyamus niger*.

### 4.7.5 Capsicum annuum

The remedy *Capsicum annuum* exhibited both general and mental symptoms related to its natural history. General symptoms found to be of significance to its natural history are listed below although most of the sub rubrics were unrelated to keywords or synonyms relating to its natural history.

GENERALS - **ABSCESSES** GENERALS - **BURNS** GENERALS - **CONVULSIONS** GENERALS - **INFLAMMATION** GENERALS - **INJURIES** GENERALS - **ITCHING** GENERALS - **NECROSIS** GENERALS - **PAIN** GENERALS - **TWITCHING** 

Only two general symptoms contained sub rubrics in their relation to keywords and synonyms relating to the natural history of *Capsicum annuum* and are listed below:

GENERALS - SENSITIVENESS - **pain**, to GENERALS - VARICOSE veins - **itching** 

General Symptoms of more significance according to the researcher were symptoms containing more than one keyword or synonym from the natural history in their rubrics and sub rubrics and feature below:

GENERALS - **PAIN** - **burning** GENERALS - **PAIN** - **burning** - stinging GENERALS - **PAIN** - Externally - **ulcerative pain** GENERALS - **PAIN** - Internally - **burning** GENERALS - **PAIN** - Mucous membranes - **burning** GENERALS - **PAIN** - Parts - various parts of body; in - **burning** 

Mental symptoms found to be relating to the natural history of *Capsicum annuum* included the following symptoms below. As in other remedies in the study sub rubrics belonging to the following symptoms were unrelated to keywords from the natural history of *Capsicum annuum*.

### MIND - DELIRIUM MIND - IRRITABILITY

The correlation between the natural history of Capsicum annuum and the homoeopathic mental and general symptoms can be summarised as illustrated in table 21.

### Table 21: Keywords relating to the natural history of Capsicum annuum and keywords of rubrics of Capsicum annuum

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Discomfort	Pain
Ulceration	Ulcerative
Burns	Burns
Injuries	Injuries
Irritation	Irritability

No mental symptoms contained sub rubrics in relation to keywords and synonyms relating to the natural history. Mental symptoms containing more than one keyword or synonym from the natural history of *Capsicum annuum* were found. From the general and mental symptoms related to the natural history of *Capsicum annuum* it is evident that general symptoms were more significant in terms of relation to the natural history of *Capsicum annuum* than the mental symptoms in the study, thus proving the hypothesis as applicable to *Capsicum annuum*.

### 4.7.6 Nicotiana tabacum

In *Nicotiana tabacum* both general and mental symptoms were found to be of significant importance in relation to its natural history. General symptoms found to be of significance to its natural history included the following symptoms below. Most of the sub rubrics of these general symptoms were unrelated to the keywords or synonyms relating to the natural history of Nicotiana *tabacum*.

GENERALS - CONVULSIONS GENERALS - TREMBLING GENERALS - TWITCHING GENERALS - WEAKNESS

The following general symptoms listed below contained sub rubrics in their relation to keywords and synonyms relating to the natural history of *Nicotiana tabacum*.

GENERALS - FAINTNESS - **perspiration** - cold, with GENERALS - FAINTNESS - **vertigo; with** 

Of more significance according to the researcher were general symptoms containing more than one keyword or synonym from the natural history. Once again symptoms containing more than one keyword or synonym from the natural history in their rubrics and sub rubrics were thought to be of more significance as they related more specifically to the symptom. The following general symptoms contained more than one keyword or synonym from the natural history of *Nicotiana tabacum*.

#### GENERALS -**TREMBLING** - Externally - **convulsive** GENERALS - **WEAKNESS** - **nervous** GENERALS - **WEAKNESS**- **vertigo**; with

Mental symptoms found to be of significance in relation to *Nicotiana tabacum* included the following symptoms listed below. As in general symptoms most of the sub rubrics belonging to the symptoms were unrelated to keywords from the natural history of *Nicotiana tabacum*.

MIND - ANXIETY MIND - CONFUSION of mind MIND - EXCITEMENT MIND - IRRITABILITY MIND - MEMORY MIND - NAUSEA MIND - RESTLESSNESS

The following mental symptoms listed below contained sub rubrics in relation to their natural history.

MIND - MEMORY - **weakness** of memory MIND - MEMORY - **weakness** of memory - expressing oneself, for MIND - MEMORY - **weakness** of memory - orthography, for MIND - SADNESS – **anxious** 

Mental symptoms containing more than one keyword or synonym per symptom and of more significance to the researcher included the following mental symptoms listed below:

MIND - **ANXIETY** - **perspiration** - cold, with MIND - **RESTLESSNESS** - **anxious** MIND - **RESTLESSNESS** - **anxious** - driving from place to place The correlation between the natural history of *Nicotiana tabacum* and the homoeopathic mental and general symptoms can thus be summarised as illustrated in table 22.

### Table 22: Keywords relating to the natural history of *Nicotiana tabacum* and keywords of rubrics of *Nicotiana tabacum*

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Weakness	Weakness
Tremor	Trembling
Convulsions	Convulsions
Confusion	Confusion
Excitation	Excitement
Anxiety	Anxiety
Irritability	Irritability
Dizziness	Vertigo
Perspiration	Perspiration

From the general and mental symptoms discussed above it is apparent that relationships between the natural history of *Nicotiana tabacum* and its general and mental symptoms exist, thus proving the hypothesis as applicable to *Nicotiana tabacum*.

### 4.7.7 Mandragora officinarum

In this remedy only one general symptom related to its natural history, GENERALS-**ANALGESIA.** Sub rubrics belonging to general symptoms of this remedy also showed no relationship to the natural history according to the methodology used by the researcher. However the following mental symptoms were related to the natural history.

MIND - DELIRIUM MIND - DELUSIONS MIND - EUPHORIA MIND - EXITEMENT MIND - RESTLESSNESS The correlation between the natural history of *Mandragora officinarum* and the homoeopathic mental and general symptoms can thus be summarised as illustrated in table 23.

### Table 23: Keywords relating to the natural history of *Mandragora officinarum* and keywords of rubrics of *Mandragora officinarum*

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Hallucinations	Delusions
Euphoria	Excitement
Confusion	Delirium

No keywords or synonyms belonging to sub rubrics of the mental symptoms related to the natural history and therefore no significant mental symptoms could be found which contained more than one keyword or symptom from the natural history. It can therefore be deduced that the remedy *Mandragora officinarum* showed far less relationships between its natural history and general and mental symptoms than other remedies in the study, thus proving the hypothesis as applicable to *Mandragora officinarum*.

### 4.7.8 Solanum nigrum

Although the smallest remedy in terms of general and mental symptoms in the study, *Solanum nigrum* exhibited relationships between its natural history and general and mental symptoms. General symptoms related to its natural history are listed below.

#### GENERALS - CONVULSIONS GENERALS - RESTLESSNESS GENERALS – TWITCHING

The symptom GENERALS - **RESTLESSNESS** - convulsive was the only symptom containing keywords or synonyms in both the main rubric and sub rubric and was a more significant general symptom in the view of the researcher.

Mental symptoms related to the natural history included the following symptoms. In general the majority of symptoms had sub rubrics unrelated to the natural history of the remedy and are listed below.

MIND - ANXIETY MIND - COMA MIND - DELIRIUM MIND - RESTLESSNESS MIND - UNCONSCIOUSNESS

The following mental symptoms listed below contained sub rubrics in their relation to the natural history of *Solanum nigrum*.

MIND - GESTURES, makes - convulsive

Mental symptoms containing more than one keyword or synonym in their rubrics and sub rubrics and which the researcher found to be of more significance were as follows.

### MIND - **ANXIETY** - beside oneself from **anxiety**; being MIND - **RESTLESSNESS** - **convulsive**

The correlation between the natural history of *Solanum nigrum* and the homoeopathic mental and general symptoms can thus be summarised as illustrated in table 24.

### Table 24: Keywords relating to the natural history of Solanum nigrum andkeywords of rubrics of Solanum nigrum

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Restlessness	Restlessness
Delirium	Delirium
Coma	Coma

From the general and mental symptoms related to the natural history of *Solanum nigrum* it is evident that relationships do exist between the natural history of the remedy and its general and mental symptoms, thus proving the hypothesis as applicable to *Solanum nigrum*.

# 4.8) Hypothesis 2: Collective commonalities and correlations exist between the general and mental symptoms of the Solanaceae family and its natural history as a whole.

From the tables in section 4.7 above, common keywords from the natural history and keywords of rubrics from each remedy were extracted to observe commonalities exhibited by the Solanaceae group as a whole. The relative common symptoms related to the natural history of the group as a whole are tabulated in table 25 below.

## Table 25: Summary of keywords relating to the natural history of the *Solanaceae* family sample group and keywords of rubrics of the Solanaceae sample group relating to the group as a whole.

NATURAL HISTORY KEYWORDS	KEYWORDS OF RUBRICS
Convulsions	Convulsions
Hallucinations	Delusions
Confusion	Delirium
Anxious	Anxiety

From the above table it can be seen that commonalities exist between natural history keywords and the keywords of rubrics from the *Solanaceae* group as a whole. Thus proving the hypothesis as applicable to the *Solanaceae* group as a whole.

### 4.9) <u>Conclusion</u>

The results thus reflect relationships between the natural history and general and mental symptoms via the use of keywords and synonyms derived from the natural history of species belonging to the Solanaceae plant family. General and mental symptoms related to the natural history of the species of the sample group as well as the *Solanaceae* family will be further discussed in chapter 5.

### **CHAPTER: 5 DISCUSSION OF RESULTS**

Relationships via the use of keywords and synonyms obtained from the natural history of the *Solanaceae* have been extracted and analysed in chapter 4 in an attempt to further understand the relationship between the natural history of the *Solanaceae* family and its general and mental symptoms homoeopathically. This chapter aims to discuss broader concepts pertaining to the relationships between the individual remedies general and mental symptoms and their respective natural histories. Furthermore, common relationships between the general and mental symptoms and the natural history of the family as a whole will be expanded on.

### 5.1 Relationships of individual Solanaceae remedies to their relative natural histories.

### 5.1.1 Atropa belladonna

*Atropa belladonna* exhibits a selection of characteristics pertaining to its natural history. *Atropa belladonna's* habitat and distribution ranges from abandoned places, old quarries, waste places and ruins. Its global distribution ranges from deciduous forests in Asia, Europe and Mediterranean regions of North Africa. This perennial herb which is characterised by soft stems, bright green simple leaves, yellowish brown tubular flowers, which are followed by big black shiny berries, has been used historically by ancient Mesopotamians for treating illness and for its hallucinogenic effects. Its use in mythology by the devil, Greeks, Romans and witches is also noted. Its use as a mydriatic, poison and spasmolytic has also been documented. *Atropa belladonna's* physiological actions and toxicology range from hallucinations to sedation and are attributed to the primary alkaloids atropine, hyoscyamine, nicotine and scopolamine found within the plant.

From this abundance of characteristics found in *Atropa belladonna's* natural history *commonalties* relating to general and mental rubrics and the natural history were found. These commonalities in terms of keywords included is discussed below:

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- The keyword "aggression" from the natural history, is synonymous with the word "violent" featured in the symptoms from the study, and can be related to *Atropa belladonna's* mythology where it was used in wine to improve the aggression of certain warriors.
- The keyword "confusion" found in the natural history and found in symptoms from the study, relates to the confusion manifested in *Atropa belladonna's* toxicology brought on by the action of the alkaloids atropine, hyoscyamine, nicotine and scopolamine on the central nervous system.
- The keyword "devil" found in *Atropa belladonnas* natural history and found in symptoms studied relates to its mythology in its natural history where it is said to be trimmed by the devil when preparing for the witches' Sabbath.
- The keyword "euphoria" from the natural history which is synonymous with the word "exhilaration" found in the studied rubrics relates to the euphoria explained in its toxicology brought on by the action of the alkaloids atropine, hyoscyamine, nicotine and scopolamine on the central nervous system.
- The keyword "hallucinations" found in the natural history and synonymous with the word "delusions" found in rubrics can be related to the physiological actions and toxicology where we see its action as a hallucinogenic and is brought on by the action of the alkaloids atropine, hyoscyamine, nicotine and scopolamine on the central nervous system.
- The keyword "insomnia" found in the natural history of Atropa belladonna and synonymous with the word "sleeplessness" found in the rubrics studied can be related back to its toxicology where insomnia features predominate and is brought on by the action of the alkaloids atropine, hyoscyamine, nicotine and scopolamine on the central nervous system.

- The keyword "red" found within Atropa belladonna's natural history and synonymous with the words redness found in the rubrics studied can be related redness of the face as found in Atropa belladonnas toxicology brought on by the action of the alkaloids atropine, hyoscyamine, nicotine and scopolamine on the circulatory system causing vasodilation.
- The keyword "spasms" found in the natural history, and synonymous with the words "convulsions", "jerking" and "twitching", can be related back to the natural history of *Atropa belladonna* as far as its physiological actions characteristics are concerned. This is highlighted in *Atropa belladonna's* spasmolytic physiological action described in its natural history which is brought on by action of the alkaloids atropine, hyoscyamine, nicotine and scopolamine and their effect on the peripheral nervous system.
- The keyword "warriors" found in *Atropa belladonna's* natural history and synonymous with the word "soldiers" relates to *Atropa belladonna's* mythology which explains it as being used to increase the aggressiveness of certain warriors.

The discussion above therefore describes the relationship of keywords extracted from the natural history of *Atropa belladonna* and the studied general and mental rubrics. It is therefore clear that a relationship exists between the natural history of *Atropa belladonna* and its general and mental symptoms.

### 5.1.2 Solanum dulcamara

Solanum dulcamara exhibits a selection of characteristics pertaining to its natural history. Its habitat and distribution ranges from Asia to Europe and North America. *Solanum dulcamara* is described as a deciduous woody climber up to 0.5 meters bearing simple or lobed leaves, dark purple flowers and attractive berries that are bright red when mature. Historically this plant has been used by ancients to induce sleep, treat rheumatism, gout and in the treatment of whooping cough. Its use in mythology ranges from the treatment of warts to tumours. The physiological actions

and toxicology which range from anticholinergic effects to hallucinations are attributed to the primary alkaloids which are glycosides of soladulcidine, tomatidenol and solasodine, which are found within the plant.

From this abundance of characteristics found in *Solanum dulcamara's* natural history, *commonalties* relating to general and mental rubrics and the natural history were found. These commonalities, in terms of keywords, included the following discussed below:

- The keyword "depression" from the natural history which is synonymous with the keyword "sadness" found in the mental symptoms studied, relates to *Solanum dulcamara's* toxicology in its natural history where depression is seen as a feature of its toxicology and is brought on by the action of alkaloids which are glycosides of soladulcidine, tomatidenol and solasodine on the central nervous system.
- The keyword "dizziness" from the natural history, which is synonymous with the word "vertigo" which occurred in the symptoms studied, relates to the mythology in *Solanum dulcamara's* natural history where we see its use in folk medicine as a remedy for dizziness and vertigo.
- The keyword "forgetting" from the natural history, which is synonymous with the word "absentminded" seen in the mental symptoms in the study, can also be related to the mythology of *Solanum dulcamara* where its use as helping one forgetting past love is seen.
- The keyword "hallucinations" from the natural history which is synonymous with the word "delusions" found in mental symptoms in the study, is related to the toxicology in the natural history where hallucinations are described and is brought on by the action of alkaloids which are glycosides of soladulcidine, tomatidenol and solasodine on the central nervous system.

• The keyword "rheumatic" from the natural history which is also found in symptoms in the study is related to the use of *Solanum dulcamara* in its natural history where it is described as being used in rheumatic conditions.

The discussion above therefore describes the relationship of keywords extracted from the natural history of *Solanum dulcamara* and the studied general and mental rubrics. It is therefore clear that a relationship exists between the natural history of *Solanum dulcamara* and its general and mental symptoms.

### 5.1.3 Datura stramonium

*Datura stramonium* exhibits a selection of characteristics pertaining to its natural history. From its original habitat in tropical North America, it is now distributed worldwide. It is described as robust annual up to 1.5 meters in height, with large unpleasantly scented leaves and large white or purplish, tubular, erect flowers and typical thorny capsules that split open to release numerous small, kidney shaped black seeds. Historically this plant has been used as an intoxicant, infanticide and as a poison in murder and suicide. *Datura stramonium's* use in puberty rites by Luisena Indians, its association with the forces of darkness and the use of its seeds by gypsies in the preparation of love potions features in its mythology. *Datura stramonium's* physiological action and toxicology ranging from it being a depressant, to it causing respiratory arrest, can be attributed to the primary alkaloids atropine, hyoscyamine and scopolamine found within the plant.

From this abundance of characteristics found in *Datura stramonium's* natural history, *commonalties* relating to general and mental rubrics and the natural history were found. These commonalities, in terms of keywords, included the following discussed below:

• The keyword "amnesia" from the natural history, which is synonymous with the keyword "forgetful" found in the mental symptoms studied, relates to *Datura stramonium's* toxicology where amnesia is seen as a feature here and is brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant on the central nervous system.

- The keyword "anxious" from the natural history, which is synonymous with the word "anxiety" found in mental symptoms is related to *Datura stramonium*'s toxicology where anxiety is described here and is brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant on the central nervous system.
- The keyword "darkness" from the natural history, which is synonymous with the keyword "dark" from mental symptoms studied, is related to *Datura stramonium*'s mythology where it features as being associated with forces of darkness.
- The keyword "death" from the natural history, which also occurred in mental symptoms studied, relates to the toxicology of *Datura stramonium* found within its natural history where death is featured in its toxicology, brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant, which cause respiratory arrest.
- The keyword "hallucinations" from the natural history of *Datura stramonium*, and synonymous with the word "delusions" found in mental symptoms studied, relates to *Datura stramonium's* toxicology in its natural history where we see hallucinations featuring predominantly and is brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant on the central nervous system.
- The keyword "intoxicant" from the natural history of *Datura stramonium* and synonymous with the word "intoxication" found in the general symptoms studied, relates to *Datura stramonium's* history in its natural history where it was traditionally used as an intoxicant.

- The keyword "love" from *Datura stramonium*'s natural history, and also found in mental symptoms in the study, relates to *Datura stamonium*'s mythology in its natural history where it was used by gypsies in preparation of love potions.
- The keyword "murder" from *Datura stramonium*'s natural history and synonymous with the words "murdering" and "murdered" found in the mental symptoms studied, relates to *Datura stramonium*'s history in its natural history where we see its use in murder.
- The keyword "suicide" from *Datura stramonium's* natural history, synonymous with the word "suicidal" found in mental symptoms studied, relates to its use in its natural history where we see it being used in suicide.
- The keyword "reddening" from *Datura stramonium's* natural history, synonymous with the word "red" from general symptoms in the study, relates to the toxicology found in its natural history where red face features and is brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant which cause vasodilation.

The discussion above therefore describes the relationship of keywords extracted from the natural history of *Datura stramonium* and the studied general and mental rubrics. It is therefore clear that a relationship exists between the natural history of *Datura stramonium* and its general and mental symptoms from the discussion above.

#### 5.1.4 Hyoscyamus niger

*Hyoscyamus niger* exhibits an selection of characteristics pertaining to its natural history. *Hyoscyamus niger* which is Native to Europe, Western Asia and Northern Africa is found abundantly on rubbish heaps and near old buildings. It is described as an annual or biennial herb up to 0.8 meters, with soft, hairy stems and soft, lobed and sparsely hairy leaves. The petals are greyish yellow with dark purple veins and the plant is characterised by a disgusting smell. Historically *Hyoscyamus niger* has been used to treat asthma, toothache, mania and hysteria. Its use as a poison and as a means to induce dementia has also been documented. In Greek mythology, the

dead were adorned with *Hyoscyamus niger* when they wandered. *Hyoscyamus niger*'s physiological action and toxicology ranges from central paralysis to being a spasmolytic is attributed to the primary alkaloids atropine, hyoscyamine and scopolamine found within the plant.

From this abundance of characteristics found in *Hyoscyamus niger's* natural history, commonalties relating to general and mental rubrics and the natural history were found. These commonalities, in terms of keywords included, the following discussed below:

- The keyword "confusion" found in *Hyoscyamus niger*'s natural history and found in mental symptoms in the study relates to the toxicology found in *Hyoscyamus niger*'s natural history where confusion features and is brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant on the central nervous system.
- The keywords "seisures" and "spasms" found in *Hyoscyamus niger's* natural history, synonymous with the words "convulsions" found in general symptoms in the study are related to *Hyoscyamus niger's* uses and toxicology found in its natural history where we see its use in treating convulsions and it featuring as causing seizures in its toxicology. Its toxicology is brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant on the central and peripheral nervous systems.
- The keyword "dementia" found in *Hyoscyamus niger's* natural history and found in mental symptoms in the study, relates to *Hyoscyamus niger's* history in its natural history where it was used to induce dementia.
- The keyword "epilepsy" found in *Hyoscyamus niger's* natural history and synonymous with the word "epileptic" found in general symtoms in the study relates to *Hyoscyamus niger's* history in its natural history where it was historically used in treating epilepsy.

- The keyword "euphoria" found in *Hyoscyamus niger's* natural history, synonymous with the keyword "excitement" found in mental symptoms in the study, relates to *Hyoscyamus niger's* toxicology in its natural history where we see euphoria as a feature. This is brought on by the action of the alkaloids atropine, hyoscyamine and scopolamine found within the plant on the central nervous system.
- The keyword "mania" found in *Hyoscyamus niger's* natural history, synonymous with the keyword "manic" found in mental symptoms studied, relates to *Hyoscyamus niger's* history in its natural history where it was used to treat mania.
- The keyword "poison" from *Hyoscyamus niger's* natural history, synonymous with the keyword "poisoned" found in the mental symptoms studied relates to *Hyoscyamus niger's* history in its natural history where we see it being used as a poison due to its effect as a central paralytic.

The discussion above therefore describes the relationships of keywords extracted from the natural history of *Hyoscyamus niger* and the studied general and mental rubrics. It is therefore clear that a relationship exists between the natural history of *Hyoscyamus niger* and its general and mental symptoms from the discussion above.

### 5.1.5 Capsicum annuum

*Capsicum annuum* exhibits a selection of characteristics pertaining to its natural history. This plant is indigenous to Central and South America and is cultivated in tropical countries up an altitude of 200 meters. *Capsicum annuum* is described as an annual plant of up to 0,5 meters in height with dark green, stalked leaves, white flowers and oblong green and red fruit. Historically this plant has been used by Mexican Indians and Szechwan Chinese in many of their meals as a flavour enhancer. Its use as a "wonder drug" from being used in treating everything from harmful bacteria and releasing lock jaw has been documented in its mythology. Its physiological action and toxicology ranging from it causing pain and severe irritation

to the mucous membranes and skin is attributed to the alkaloid capsaicin found within the plant.

From this abundance of characteristics found in *Capsicum annuum*'s natural history, *commonalties* relating to general and mental rubrics and the natural history were found. These commonalities, in terms of keywords, included the following discussed below:

- The keyword "burns" from *Capsicum annuum*'s natural history is found in general rubrics pertaining to *Capsicum annum* in the study, and relates to its mythology in its natural history where we see it as being used for the treatment of burns.
- The keyword "discomfort" from *Capsicum annuum*'s natural history, synonymous with the keyword "pain" found in general symptoms pertaining to the study, relates to the physiological actions in *Capsicum annuum*'s natural history where both discomfort and pain feature. This is brought on by the irritant action of the alkaloid capsaicin found within the plant.
- The keyword "injuries" from *Capsicum annuum*'s natural history and found in general symptoms pertaining to *Capsicum annuum* in the study, relates to the mythology in *Capsicum annuum*'s natural history where it is seen in treating injuries.
- The keyword "irritation" from Capsicum annuum's natural history and synonymous with the keyword "irritability" found in mental symptoms pertaining to Capsicum annuum in the study, relates to the toxicology in Capsicun annuum's natural history where it is seen as causing irritation. This is brought on by the alkaloid capsaicin found within the plant.
- The keyword "ulceration" from *Capsicum annuum*'s natural history, synonymous with the keyword "ulcerative" found in general symptoms pertaining to *Capsicum annuum* in the study, relates to the physiological

action in *Capsicum annuum*'s natural history where it is seen as causing ulceration when exposed to the skin and mucosa. This is brought on by the alkaloid capsaicin found within the plant.

The discussion above therefore describes the relationships of keywords extracted from the natural history of *Capsicum annuum* and the studied general and mental rubrics. It can therefore be deduced that relationships exists between the natural history of *Capsicum annuum* and its general and mental symptoms.

### 5.1.6 Nicotiana tabacum

*Nicotiana tabacum* exhibits a selection of characteristics pertaining to its natural history. This plant is found in Central America and is cultivated worldwide. It is described as an erect, leafy and single stemmed annual herb with large, glandular leaves and pink tubular flowers. Historically this plant was smoked by the Indians in pre Columbian times and used as an insecticide. Today this plant is still smoked worldwide. In its mythology we see its use in curative rituals of tribes of the North East Amazon and its ordinary medicinal use in some tribes. Its physiological action and toxicology ranging from convulsions to tachycardia are attributed to the alkaloids anabasine, nicotine, nornicotine and nicotyrine.

From this abundance of characteristics found in *Nicotiana tabacum's* natural history, *commonalties* relating to general and mental rubrics and the natural history were found. These commonalities in terms of keywords included the following discussed below:

 The keyword "anxiety" from the natural history of Nicotiana tabacum and found in mental symptoms pertaining to Nicotiana tabacum in the study, relates to Nicotiana tabacum's toxicology in its natural history where we see anxiety as a feature. This is brought on by the action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the central nervous system.

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- The keyword "confusion" from the natural history of *Nicotiana tabacum* and found in mental symptoms pertaining to *Nicotiana tabacum* in the study, relates to *Nicotiana tabacum's* physiological actions and toxicology in its natural history where we see confusion as a feature. This is brought on by the action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the central nervous system.
- The keyword "convulsions" from the natural history and found in general symptoms pertaining to Nicotiana tabacum in the study relates to Nicotiana tabacum's toxicology in its natural history where convulsions feature. This is brought on by the action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the central nervous system.
- The keyword "dizziness" found in *Nicotiana tabacum's* natural history and synonymous with the keyword "vetigo" in general symptoms pertaining to the study of *Nicotiana tabacum*, relates to the toxicology of *Nicotiana tabacum* in its natural history where we see dizziness as a feature. This is brought on by the action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the central nervous system.
- The keyword "excitation" found in *Nicotiana tabacum's* natural history, synonymous with the keyword "excitement" in general symptoms pertaining to the study of *Nicotiana tabacum*, relates to the physiological action of *Nicotiana tabacum* in its natural history where we see excitement as a feature. This is brought on by the action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the central nervous system.
- The keyword "perspiration" from the natural history and found in general symptoms pertaining to *Nicotiana tabacum* in the study relates to *Nicotiana tabacum*'s toxicology in its natural history where perspiration is a feature. This is brought on by action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the sympathetic nervous system.

- The keyword "tremor" found in *Nicotiana tabacum's* natural history, synonymous with the keyword "trembling" in general symptoms pertaining to the study of *Nicotiana tabacum*, relates to the toxicology of *Nicotiana tabacum* in its natural history where we see tremor as a feature. This is brought on by the action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the central nervous system.
- The keyword "weakness" from the natural history and found in general symptoms pertaining to *Nicotiana tabacum* in the study, relates to *Nicotiana tabacum*'s physiological actions in its natural history where weakness is a feature. This is brought on by the action of the alkaloids anabasine, nicotine, nornicotine and nicotyrine on the central nervous system.

The discussion above therefore describes the relationships of keywords extracted from the natural history of *Nicotiana tabacum* and the studied general and mental rubrics. It is therefore deduced that relationships exists between the natural history of *Nicotiana tabacum* and its general and mental symptoms exist.

### 5.1.7 Mandragora officinarum

*Mandragora officinarum* exhibits an selection of characteristics pertaining to its natural history. Its habitat and distribution ranges from areas of the Mediterranean and eastwards to the Himalayas. This perennial herb characterised by its thick tuberous roots which have traditionally been thought to resemble the human body. It also exhibits a rosette of dark green leaves and greenish white flowers in spring, which is later followed by ball shaped fruits. Its uses historically range from an aphrodisiac to the treatment of worms and its use in magic, superstitious practices and as symbol of fertility is documented in its mythology. The physiological actions and toxicology which range from hallucinations to vomiting are well documented and are attributed to the alkaloids atropine, hyoscyamine, mandragorine and scopolamine found within the plant.

From this abundance of characteristics found in *Mandragora officinarum*'s natural history *commonalties* relating to general and mental rubrics and the natural history were found. These commonalities, in terms of keywords, included the following discussed below:

- The keyword "confusion" from the natural history which is synonymous with the keyword "delirium" found in the mental symptoms studied, relates to *Mandragora officinarum's* toxicology where confusion features here. This is brought on by the action of the alkaloids atropine, hyoscyamine, mandragorine and scopolamine on the central nervous system.
- The keyword "euphoria" from the natural history, synonymous with the word "excitement" found in mental symptoms studied, relates to *Mandragora officinarum's* toxicology where both euphoria and excitement are seen as a feature of its toxicology in its natural history. This is brought on by the action of the alkaloids atropine, hyoscyamine, mandragorine and scopolamine on the central nervous system.
- The keyword "hallucinations" from the natural history, synonymous with the keyword "delusions" found in the mental symptoms studied, relates to *Mandragora officinarum's* physiological actions and toxicology where we see hallucinations being a predominant feature here. This is brought on by the action of the alkaloids atropine, hyoscyamine, mandragorine and scopolamine on the central nervous system.

The discussion above therefore describes the relationships of keywords extracted from the natural history of *Mandragora officinarum* and the studied general and mental rubrics. It can therefore be deduced that relationships exists between the natural history of *Mandragora officinarum* and its general and mental symptoms.

### 5.1.8 Solanum nigrum

*Solanum nigrum* exhibits a selection of characteristics pertaining to its natural history. This plant is native to Europe and Asia and is also found in tropical and temperate regions of the world. It is an annual plant rarely growing 0.5 meters in length and is much branched. The flowers are arranged in clusters and are small and white and are later succeeded by small round black berries. Historically the fresh bruised leaves of the plant were used to abate inflammation and applied to burns and ulcers by the Arabs. Its use in treating asthma and digestive orders has also been documented. The physiological actions and toxicology ranging from disturbances of the gastrointestinal tract to restlessness and coma are attributed to the alkaloids solanine and other steroidal alkaloids found within the plant.

From this abundance of characteristics found in *Solanum nigrum's* natural history, *commonalties* relating to general and mental rubrics and the natural history were found. These commonalities, in terms of keywords, included the following discussed below:

- The keyword "coma" found in *Solanum nigrum's* natural history and found in the mental symptoms in the study relates to *Solanum nigrums* toxicology found within its natural history where we see coma being featured here. This is brought on by the action of the alkaloid solanine, and other steroidal alkaloids on the central nervous system.
- The keyword "delirium" found in *Solanum nigrum's* natural history and found in the mental symptoms studied relates to *Solanum nigrum's* toxicology found within its natural history where we see delirium featured here. This is brought on by the action of the alkaloid solanine, and other steroidal alkaloids on the central nervous system.

The discussion above therefore describes the relationships of keywords extracted from the natural history of *Solanum nigrum* and the studied general and mental

rubrics. It is therefore deduced that relationships exists between the natural history of *Solanum nigrum* and its general and mental symptoms.

The discussion in section 5.1 therefore highlights relationships between general and mental symptoms and the natural histories of plants of the sample group, therefore proving the first hypothesis.

### 5.2 Commonalities of keywords pertaining to the Solanaceae group as a whole.

Commonalities in terms of keywords relating to the group as a whole were found. These commonalities in terms of keywords and synonyms included anxiety, anxious, confusion, convulsions, delirium, hallucinations and spasms. The keywords, delirium, hallucinations and spasms found in common throughout the *Solanacea* family as a whole are exhibited as themes in Solanaceae remedies according to Mangialavori (2007) and Sankaran (2002).

THEMES ACCORDING TO MANGIALAVORI	THEMES ACCORDING TO SANKARAN
Aggression	Anaesthetic
Amnesia	Apoplexy
Anger	Black and white
Calmness	Bursting
Darkness	Choking
Defensiveness	Constricting
Delirium	Cowardice
Deprivation	dark
Deprivation	Death
Destruction	Explosive
Dogs	Faintness
Explosive anger	Hurried
Hallucinations	Jerking
Loquacity	Killed
Loss of inhibition	Life
Night	Light
Over control	Murder
Rationalisation	Panic
Self-destruction	Pulsating
Sudden anger	Pursued
Victims	Rage
Violence	Shooting

### Table 26: Themes exhibited in Solanaceae remedies according to Mangialavori (2007) and Sankaran (2005).

Wolves	Shrieking
	Sluggish
	Spasmodic
	Spasms
	Splitting
	Startling in sleep
	Striking
	Stupefied
	Stupor
	Tearing
	Unconsciousness
	Violent
	Violent terror

Table 26 therefore highlights themes found in *Solanaceae* remedies according to studies conducted by Mangialavori (2007) and Sankaran (2002). Themes in bold print indicate themes common to *Solanaceae* study as a whole from the study.

### 5.3 Conclusion

The results therefore elucidate the first hypothesis that states that, relationships exist between individual *Solanaceae* remedies, their natural histories and their general and mental Symptoms. The results also elucidate the second hypothesis that states that collective commonalities and correlations exist between the general and mental symptoms of the *Solanaceae* family and its natural history as a whole. This is further supported by the fact that common keywords found to be common to the group as a whole were found to occur in Solanaceae plant family studies conducted by Mangialavori (2007) and Sankaran (2002).

### **CHAPTER 6: CONCLUSION AND RECOMENDATIONS**

The relationship study conducted is an entirely new concept to homoeopathy. It hoped to create a paradigm shift within the profession. From the study a definite relationship between the ethnobotanical, historical and mythological characteristics and the general and mental symptoms of the *Solanaceae* family was established, therefore bridging the gap between traditional knowledge and homoeopathic proving findings. It is the view of the researcher that the paradigm promises a deeper understanding of the *materia medica*, especially as it relates to the understanding of the natural history of kingdoms and their symptoms manifested by the remedies utilised in these kingdoms homoeopathically. A more systematic methodology and approach to homoeopathy is vital, especially in this modern age where scientific thinking dominates what is fact. This will help shift the homoeopathic profession closer to mainstream science, therefore leading to more rigorous and serious scientific studies into the principles governing homoeopathic philosophy.

### 6.1) Limitations of the methodology

Smaller, less adequately proved and homoeopathically less well defined remedies provided few, relatively unconnected general and mental symptoms in relation to the natural history of the plant family. This made it difficult to outline and understand relationships between the natural history and general and mental symptoms of smaller remedies of the sample group.

Most remedies representing the *Solanaceae* family are relatively small in terms of rubric representation, except for the 8 archetype *Solanaceae* remedies, namely *Atropa belladonna, Solanum dulcamara, Datura stamonium, Hyoscyamus niger, Capsicum annuum, Nicotiana tabaccum, Mandragora officinarum* and *Solanum nigrum.* Of the 35 remedies used in homoeopathy, 27 have less than 99 rubrics each (Archibel, 2009b). Although the sample group used for the purposes of this study revealed enough data for an accurate relationship study of the natural history of the plant family to its general and mental symptoms, the researcher was unable to confirm some ideas proposed in this study by applying them to the lesser known remedies.

The researcher also found that by limiting the relationship of the natural history to general and mental symptoms exclusively, certain important rubrics such as those found in other symptoms could have been utilised. This would have allowed for a broader and in depth relationship study of the *Solanaceae* family.

### 6.2) Recommendation for further research

Research into the *Solanaceae* family of plants is important, especially considering that they are a family of massive economic importance worldwide and are of great homoeopathic importance in their utilisation as homoeopathic remedies (Vermeulen, 2004).

Firstly, more high quality, in depth provings of both smaller remedies and previously unproven remedies belonging to the *Solanaceae* family of plants are needed. This is of great importance as more rubrics representing *Solanaceae* remedies in the literature will increase the homoeopathic understanding in terms of its relation to its natural history and symptoms belonging to remedies. The researcher felt that non-toxic species belonging to the *Solanaceae* family were excluded due to this, therefore leaving out concepts of polarity between toxic and non-toxic species which the researcher felt could have been investigated and highlighted in the study. In conjunction with this, is the need for more studies focusing on the natural history of species belonging to *Solanaceae* plant family and all the symptoms of remedies belonging to the family. Together, this will provide greater insight into the relationships between the natural history and all symptoms of the plant family thus broadening ideas and concepts that the researcher felt were limited by solely focusing on general and mental symptoms.

With a greater number of *Solanaceae* remedies in the literature, more accurate research into the relationship between the natural history and symptoms of the family can be undertaken. This too is important as more detailed rubrics can be isolated and understood as relating to the natural history of the *Solanaceae* plant family.

Further research with other families using the same paradigm is also necessary to further develop such research and to create a deeper understanding of homoeopathic kingdoms.

#### **References:**

Archibel, SA. 2009a. Encyclopedia Homeopathica. 2.21 ed. Assesse, Belgium: Archibel Homoeopathic Software.

Archibel, SA. 2009b. Radar Synthesis. 10.4 ed. Assesse, Belgium: Archibel Homoeopathic Software.

Baily, J. 2006. Collins internet linked Dictionary of Botany. Glasgow, United kingdom: Harper Collins Publishers.

Barnes, J, Gibbons, S, Heinrich, M & Williamson, E. 2006. *Fundamentals of Pharmacognosy and Phytotherapy*. Edinburgh: Churchill Livingstone.

Bott, V. 2004. An Introduction to Anthroposophical Medicine: Extending the art of *healing*. United Kingdom: Sofia Books.

Bromilow, C. 2010. *Problem Plants and Alien Weeds of South Africa*. 3 ed. Pretoria, South Africa: Briza Publications.

De Schepper, L. 2006. *Hahnemann Revisited A Textbook of Classical Homeopathy for the Professional*. Delhi,India: B.Jain Publishers (P) Ltd.

Dugmore, H & van Wyk, B. 2008. *Muthi and Myths from the African Bush*. 1 ed. Pretoria, South Africa: Morula Books.

Edmunds, J & Chweya, J. 1997. *Black nightshades Solanum nigrum L. and related species*. Rome: International plant genetic resources institute.

Gaier. 1991. *Thorsons Encyclopaedic Dictionary of Homoeopathy*. London: Thorsons - An Imprint of HarperCollins Publishers.

Gaier, HC. 1991. Thorsons Encyclopeadic Dictionary of Homoeopathy. London: Thorsons.

Grieve, M. 1981. A Modern Herbal. United States: Dover Publications.

Griffith, C. 2010. The Companion to Homoeopathy. London: Watkins Publishing.

Hahnemann , S. 2003. *Organon of Medicine*. 5 and 6 ed. New Dehli: B.Jain Publishers (P) LTD.

Herscu, P. 1996. *Stramonium*. Massachusetts: New England School of Homoeopathy Press.

Kayne, S. 2006. *Homeopathic Pharmacy Theory and Practice*. 2 ed. Edinburgh: Elsevier Churchill Livingstone.

Lee, M. 2006. The Solanaceae 2:The Mandrake (Mandragora officinarum);in league with Devil. *Journal of the Royal College of Physicians of Edinburgh*, 36 (1): 278-285.

Lee, M. 2007. Solanaceae 4: Atropa belladonna, Deadly Night shade. *Journal of the Royal College of Physicians of Edinburgh*, 37 (1): 77-84.

Lockie, A. 2000. Encyclopedia of Homoeopathy. London: Dorling Kindersly.

Mader, S. 1998. Biology. 8th ed. McGraw-Hill.

Mangialavori, M. 2007. *Solanaceae , Nightmare between Light and Dark*. Italy: Matrix Editrice.

Norland, M. 2003. Signatures Miasms AIDS. Abergavenny: Yondercott Press.

Pitt, R. 2006. *Tobacco - An Exploration of its Nature through the Prism of Homeopathy*. San Francisco: Lalibela Publishing.

Rooney, A. 2009. *The Story of Medicine*. London: Arcturus Publishing limited.

Sankaran, R. 1991. The Spirit of Homoeopathy. Bombay, India: United Arts.

Sankaran, R. 1994. *The Substance of Homoeopathy*. Bombay,India: Homoeopathic Medical Publishers.

Sankaran, R. 1997. *The Soul of Remedies*. Mumbai,India: Homeopathic Medical publishers.

Sankaran, R. 2000. *The System of Homoeopathy*. Mumbai: Homoeopathic Medical Publishers.

Sankaran, R. 2002. *An insight into plants* Bombay: Homoeopathic Medical Publishers.

Schiller, J. 2005. An Insight into Taxonomy. *Homoeopathic Links Winter 2005*, 18 (1): 203-206.

Scholten, J. 1993. *Homoeopathy and Minerals*. Bombay: Homoeopathic Medical Publishers.

Scholten, J. 2001. Minerals in Plants. Utrecht, The Netherlands: Stichting Alonnissos.

Schroyens, F (ed.) 2004. *Blueprint for a New Repertory Synthesis* 9.1 ed. London: Homoeopathic Book Publishers.

Schroyens, F (ed.) 2004. *Synthesis: Repertorium Homeopathicum Syntheticum 9.1.* 9.1 ed. London: Homeopathic Book Publishers.

Schultes, R & von Reis, S. 1997. *Ethnobotany Evolution of a Dicipline* Portland: Timber Press.

Sumner, J. 2000. *The Natural History of Medicinal Plants*. Portland: Timber Press inc.

Swayne, J. 2000. Churchill Livingstones International Dictionary of Homoeopathy London: Churchill Livingstone.

van Wyk, B. 2005. *Food Plants of the World identification, culinary uses and nutritional value*. 1 ed. Pretoria, South Africa: Briza Publications.

van Wyk, B, van Oudtshoorn, B & van Heerden, F. 2005. *Poisonous Plants of South Africa*. Pretoria: Briza Publications.

van Wyk, B & Wink, M. 2004. *Medicinal Plants of the World an illustrated scientific guide to important medicinal plants and their uses.* Pretoria: Briza publications.

Vermeulen, F. 2004. *Prisma.The Arcana of Materia Medica Illuminated;Similars and Paralells Between Substance and Remedy.* 3rd ed. Netherlands: Emryss bv publishers.

Waite, M. 2006. Oxford Paperback Thesaurus. Oxford: Oxford University Press.

Wink, M & van Wyk, B. 2008. *Mind-altering and Poisonus plants of the world*. Pretoria: Briza Publications.

Wood, M. 1997. *The Book of Herbal Wisdom: Using Plants as Medicines*. Berkeley, California: North Atlantic Books.

Wulfsohn, T. A Group Analysis of the Graminae (Grass) Plant Family of Homoeopathic Remedies Mtech (Homoeopathy) thesis, Durban Institute of Technology.