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A STUDY OF COMPOSITAE FAMILY IN RELATION TO HOMOEOPATHIC PHARMACY

A Dissertation submitted to

Dr. N.T.R. University of Health Sciences

In partial fulfillment of the requirements

For the award of the degree of

DOCTOR OF MEDICINE IN HOMOEOPATHIC PHARMACY

BY

Dr. E. VENKATA LAKSHMI

Reg. No: A2110231103

Under The Guidance of

Dr. M. HARINATH, M.D, (HOM)

Professor & P.G. Guide,

Dr. N.T.R. University of Health Sciences, Vijayawada,

Andhra Pradesh

2022- 2025

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CERTIFICATE OF GUIDE

This is to certify that the dissertation work entitled, **"A STUDY OF COMPOSITAE FAMILY IN RELATION TO HOMOEOPATHIC PHARMACY"** has been carried out by **Dr. E. VENKATA LAKSHMI**, Reg. No. A2110231103 under my direct supervision and guidance, independently and carefully in partial fulfillment of the regulations for the award of the degree of **"DOCTOR OF MEDICINE (HOMOEOPATHY)** in the subject of **HOMOEOPATHIC PHARMACY"** under **Dr. N.T.R UNIVERSITY OF HEALTH SCIENCES.**

I recommend and forward this dissertation work for submission to the adjudicators, for the award of the degree of **DOCTOR OF MEDICINE (HOMOEOPATHY)** in the subject of **HOMOEOPATHIC PHARMACY** under **Dr. N.T.R. UNIVERSITY OF HEALTH SCIENCES**, for the session 2022-2025.

I wish her every success in life.

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5.	Date and Application	24.09.2022

The institutional Ethical Committee has considered the application of Dr. E. VENKATA LAKSHMI, Post Graduate Student and has ethically cleared the afore mentioned dissertation proposal on 24.09.2022

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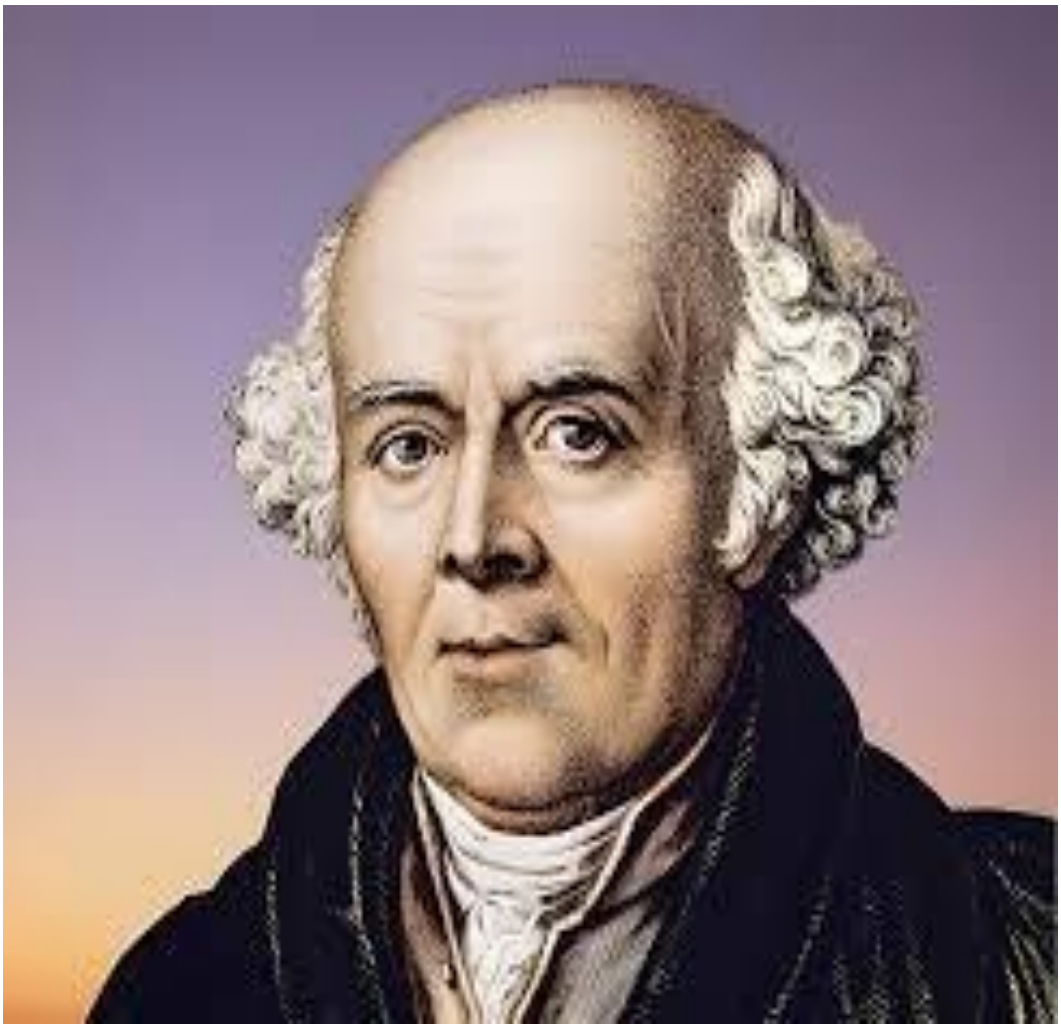

CHRISTIAN FRIEDRICH SAMUEL HAHNEMANN

Born: 10th April,1755 **Died: 2nd July, 1843**

"Let me go down to the posterity only as the image of my innerself which can easily discerned in my writings.
My vanity hoes no farther than this"

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E. VENKATALAKSHMI

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Introduction

INTRODUCTION

Homoeopathic pharmacy which is defined as the art and science of identifying, collecting, preparing, preserving, evaluating, standardizing and dispensing of medicines. It also embraces the legal and professional aspects and regulation of proper distribution of medicines.

Homoeopathic medical system is completely different and unique in aspects of Homoeopathic medicine preparation, such as dilution, succussion, and potentization from other systems of medicine. This unique system of medicine utilizes highly diluted and succussed substances, based on the fundamental principle of 'Similia Similibus Curentur'. Dr. Samuel Hahnemann the founder of Homoeopathy is the Father of Experimental Pharmacology.

Among the various sources of Homoeopathic remedies, the plant kingdom occupies a prominent position, with the Asteraceae family being particularly significant.

The Asteraceae family, also known as the daisy or sunflower family, is one of the largest and most diverse plant families, comprising over 1,900 genera and 32,000 species. This family is renowned for its diverse array of bioactive compounds, including sesquiterpene lactones, flavonoids, and essential oils, many of which exhibit potent pharmacological activities. Many plants within this family have been used for centuries in traditional medicine, including homoeopathy. Homoeopathic pharmacy, a system of alternative medicine, utilizes highly diluted plant extracts to treat various health conditions.

This study aims to investigate the role of Asteraceae family plants in Homoeopathic Pharmacy.

Specifically, it will explore the following:

- **What are the most common Asteraceae family plants utilized in Homoeopathic practice, and what are their documented medicinal properties and clinical applications?**
- **How do the botanical and chemical characteristics of Asteraceae plants influence their therapeutic effects in Homoeopathic practice?**

This study will be limited to a descriptive analysis of the existing literature and will not involve any experimental or clinical trials. The findings of this study will contribute to a better understanding of the role of Asteraceae plants in Homoeopathic Pharmacy, providing valuable insights for practitioners, researchers, and students. By exploring the intersection of botany, chemistry, and Homoeopathic principles, this research aims to further refine the understanding and application of Asteraceae remedies in clinical practice."

"Homoeopathic medicines derived from the Compositae family have a wide range of clinical applications, including the treatment of acute and chronic conditions such as fevers, injuries, convulsions, worm infestations, and gastrointestinal diseases."

This study concludes by applying the fundamental principle of Homoeopathic pharmacy that is simplicity, originality, durability and reliability of medicinal preparations specially focusing on Compositae family medicinal plants used in homoeopathy.

Aims and Objectives

AIMS AND OBJECTIVES

- To study medicinal plants of Composite family which are used in Homoeopathy.

Review of Literature

REVIEW OF LITERATURE

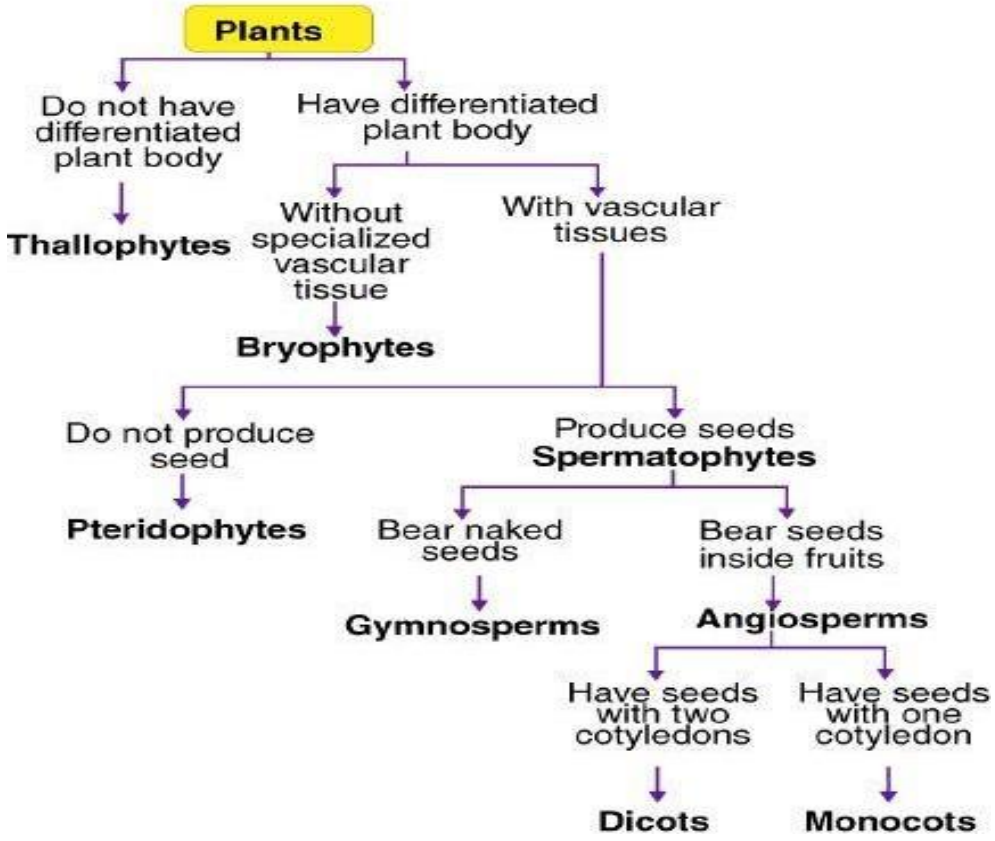
Homoeopathic Pharmacy as per HPI – Homoeopathic Pharmacy is concerned with collection, identification, preparation, standardization and preservation of the drugs used in homoeopathic practice .[1]

For preparing homoeopathic medicines from plantkingdom we need to aquire the knowledge of plants though we take opinion of botanist about information of plants during preparations. For that I do stress on basic information of Asteraceae family.

ASTERACEA (COMPOSITAE) FAMILY

TAXONOMY AND BOTANY OF ASTERACEA

Systemic position:



CLASS - Dicots

↓

SUBCLASS – Polypetalae (petals free)

↓

SERIES – Inferae (overy inferior)

↓

ORDER – Asterales

↓

FAMILY - Asteraceae - Cassini's arrangement of the Asteraceae is the

↓ back bone of our current classification 12 sub families, 43 tribes

I. **Barnadesioideae** (D. Don) Bremer & Jansen (1992)

1. Barnadesieae D. Don (1830)

II.* **Stifftioideae** (D. Don) Panero (2007)

2.* Stifftieae D. Don (1830)

III. **Mutisioideae** (Cass.) Lindl. (1829)

3. Mutisieae Cass. (1819)

4. Onoserideae (Bentham) Panero & V.A. Funk (2007)

5. Nassauvieae Cass. (1819)

IV.* **Wunderlichioideae** Panero & V.A. Funk (2007)

6. Wunderlichieae Panero & V.A. Funk (2007)

7.* Hyalideae Panero (2007)

V. **Gochnatioideae** (Benth. & Hook. f.) Panero & V.A. Funk (2002)

8. Gochnatieae (Benth. & Hook. f.) Panero & V.A. Funk (2002)

VI. **Hecastocleidoideae** Panero & V.A. Funk (2002)

9. Hecastocleideae Panero & V.A. Funk (2002)

VII. Carduoideae p.p. Cass. ex Sweet (1826)

10. Dicomeae Panero & V.A. Funk (2002)
11. Oldenburgieae S. Ortiz (2009)
12. Tarchonantheae Kostel. (1833)
13. **Cardueae** Cass. (1819)

VIII. Pertyoideae Panero & V.A. Funk (2002)

14. Pertyeae Panero & V.A. Funk (2002) Catamixis incertae sedis

IX. Gymnarrhenoideae Panero & V.A. Funk (2002)

15. Gymnarrheneae Panero & V.A. Funk (2002)

X. Cichorioideae (Juss.) Chevall. (1828)

16. **Cichorieae** Lam. & DC. (1806)
17. Arctotideae Cass. (1819)
18. Eremothamneae H. Rob. & Brettell (1973)
19. Liabeae (Cass. ex Dumort.) Rydb. (1927)
20. **Vernonieae** Cass. (1819)
21. Platycarpheae V.A. Funk & H. Rob. (2009)
22. Moquinieae H. Rob. (1994) Heterolepis incertae sedis

XI. Corymbioideae Panero & V.A. Funk (2002)

23. Corymbieae Panero & V.A. Funk (2002)

XII. Asteroideae (Cass.) Lindl. (1829)

24. **Senecioneae** Cass. (1819)
25. **Calenduleae** Cass. (1819)
26. **Gnaphalieae** (Cass.) Lecoq. & Juillet (1831)
27. **Astereae** Cass. (1819)
28. **Anthemideae** Cass. (1819)

29. **Inuleae** Cass. (1819)
30. Athroismeae Panero (2002)

    "Heliantheae alliance"
31. Feddeeae Pruski, P. Herrera, Anderb. & Franc. Ort. (2008)
32. Helenieae Lindl. (1829)
33. Coreopsideae Lindl. (1829)
34. Neurolaeneae Rydb. (1927)
35. Tageteae Cass. (1819)
36. Chaenactideae B.G. Baldwin (2002)
37. Bahieae B.G. Baldwin (2002)
38. Polymnieae (H. Rob.) Panero (2002)
39. **Heliantheae** Cass. (1819)
40. **Millerieae** Lindl. (1929)
41. **Madieae** Jeps. (1901)
42. Perityleae B.G. Baldwin (2002)
43. **Eupatorieae** Cass. (1819)

Asteraceae family with original name Compositae is a 2nd largest family next to Orchidaceae, consists of 32000 species 1900 genera distributed around the globe except for Antarctica. In India about 138 genera and about 708 species are reported.

The study of plants in Asteraceae family is called **Synantherology.**

Asteraceae family has different names:

- **Aster** – Aster in Greek referring as a celestial body with ray's.
- **Asteraceae** name came from Neo Latin from Aster the type of genus+ aceae a standardized suffix for plant family names in modern taxonomy.

- **Daisy**- Old English name Daisy meaning “day’s eye”. This is because petals open at dawn and close at dusk
- **Compositae** – The flower appears to be a single floral entity is infact a composite of much smaller flowers
- **Sunflower family**- The name sunflower is a modern translation of an older Latin name, flos solis, a reference to the large flower head and is part of this family plant hence sun flower family name came.

  Compositae is taken from **Compositi** in **Linnaeus, Philosophia Botanica** which in turn can be traced back to **Ray’s (1682) Herbae Florae Composito**.

Ivan Novich Martynoy coin the name Asteraceae accepted under the current Botanical code as the alternative name for Compositae. Asteraceae family is described by **Dutch Botanist Adriaan Van Royen** in 1740.

Homoeopathic drugs derived from composite family are from 3 sub families as follows

1. **Cichorioideae** (tribe- cichorieae, vernonieae cass)
2. **Carduoideae** (tribe – cardueae)
3. **Asteroideae** (tribes- senecioneae, calenduleae, gnaphalieae, astereae, anthemideae, inuleae, heliantheae, millerieae, eupatorieae, madieae). [2]

DESCRIPTION (O.P. SHARMA)

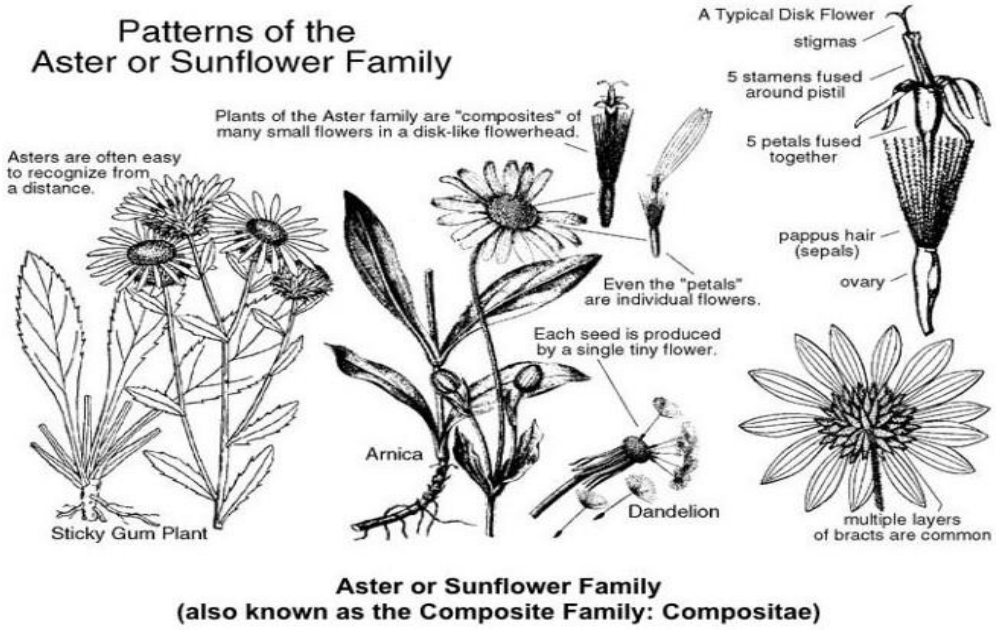


Figure 1: Patterns of sunflower family

General Habit: Usually annual or perennial herbs, but some are shrubs and only a few are trees, some are climbers; majority of temperate zone Compositae are herbaceous; sap watery or milky; usually with rhizomes, stolons, tubers; various types of surface coverings tomentose, lanate, pannose, strigose, etc.; few are xerophytes.

Leaves – Usually alternate, sometimes opposite, rarely whorled; mostly simple, sometimes needle- like or reduced to scales; margins often pinnately or palmately lobed or divided; only rarely truly compound; exstipulate; frequently in basal rosettes; leaves usually with oil passages; some contain latex.

Inflorescence- Primary inflorescence is a head or capitulum with many flowers (called florets) borne on a conical, flat, concave, or convex receptacle; each floret is often subtended by a receptacular bract called pale or chaff; the receptacle is often subtended by an involucre of bracts called phyllaries; bracts

or phyllaries are of various shapes, sizes, and textures, and present in one or more series. Usually the heads or capitula are arranged in various ways, such as racemes, panicles, corymbs, or compound heads. The capitulum may be heterogamous or homogamous.

Flower - Flowers are actinomorphic or zygomorphic; bisexual, or unisexual, or even neutral (Both stamens and carpels are aborted); pentamerous; epigynous.

In **heterogamous capitulum inflorescence**, the central florets are disk florets which are bisexual and actinomorphic; and peripheral florets are ray florets which are ligulate generally female or neutral and zygomorphic.

In **homogamous capitulum inflorescence**, all florets are similar, usually bisexual, actinomorphic or zygomorphic, rarely all unisexual.

Undermentioned are the **five** basic plans of florets found within the heads or capitula of Compositae:

1. Tubular or disc florets, corolla regular, florets perfect.
2. Tubular or disc florets, corolla regular, florets pistillate.
3. Ligulate or ray florets, zygomorphic, pistillate.
4. Ligulate or ray florets, zygomorphic, sterile.
5. Ligulate or ray florets, zygomorphic, perfect.

Calyx represented by pappus of bristles, awns, or scales; or absent; epigynous.

Corolla 5 petals, gamopetalous, valvate; represented by 3 basic types: (i) 5- lobed and tubular, (ii) ligulate with 3 to 5 teeth, (iii) bilabiate with 3 lobes in the upper lip and 2 lobes in the lower lip.

Androecium- 5 stamens, epipetalous, alternating with corolla lobes; anthers nearly always united into a tube around the style and filaments free i.e. syngenesious;

dithecous, connective often prolonged, introrse, longitudinally dehiscent.

Gynoecium- Bicarpellary, syncarpous; ovary inferior; unilocular; one ovule, anatropous; basal placentation; style 1; usually 2 branched stigma of diverse forms; an epigynous nectar- secreting disc is also present at the base of the corolla tube surrounding the style.

Fruit and seeds- Fruit a cypsela, often crowned by the persistent pappus, sometimes enclosed by persistent bracts. Seed is 1 per fruit; with large and straight embryo and no endosperm.

Pollination- Entomophilous; a single insect may pollinate numerous flowers of a capitulum in single visit. Insects are attracted by the conspicuous ligulate ray florets of the capitulum. Ray florets also protect the nectar from rain. Cross pollination is promoted also by the protandrous condition of the androecium. In case of failure of cross-pollination, self-pollination may also take place.

Floral Formula of Ray and Disc florets –

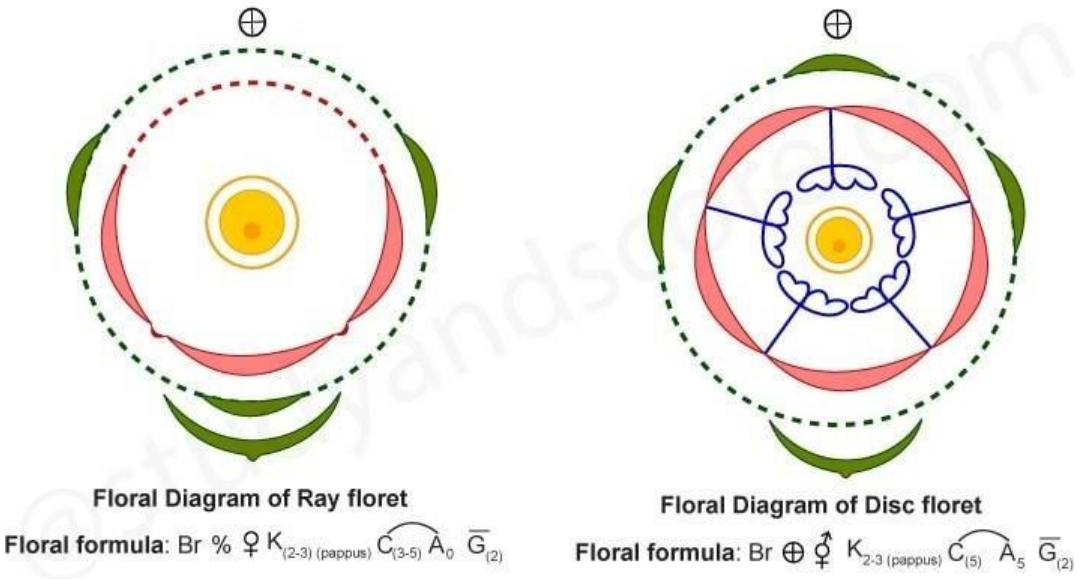


Fig. 2 Floral formula

Anatomical characters

1. Homogenous medullary rays
2. Small vessels and fibers
3. Fibers with simple pits
4. Presence of intra xylary phloem, medullary and cortical bundles, anomalous secondary growth.

Economical importance:

- **Ornamental plants**: Aster amellus, A.grandiflorus, Calendula officinalis, Centaurea moschata, Chrysanthemum carinatum, C.coronarium, C.indicum, Coreopsis grandiflora, Cosmos bipinnatus, Dahlia excelsa, D. pinnata, Dimorphotheca sinuate, Gaillardia pulchella, Gynura aurantiaca, Helianthus annus, Helichrysum petiolatum, Tagetus patula, Zinnia elegans and Z. linearis.
- **Disease- Causing Plants**: Ambrosia artemissifolia – pollen cause hay fever. Eupatorium urticaefolium causes milk sickness in animals. Pyrethrum hysterophorus – pollen cause skin allergy.
- **Insecticides**: Powdered dry capitula of Centrantherum anthelmenticum, Chrysanthemum coccineum and Pyrethrum cinerariifolium are used in preparing insecticides.
- **Edible products**: Tuberous roots of Cynara scolymus, Dahlia tuberosa, Helianthus tuberosus and Tragopogon porrifolius are edible and used as food by man. Lactuca sativa leaves are eaten raw as salad. Roasted seeds of Taraxacum officinale are used in place of coffee.
- **Oils**: Oils obtained from seeds of Carthamus tinctorius is used for manufacture of soaps, paints, varnishes. Hair oil Bhringraj is obtained

from the leaves of Eclipta alba. Fatty oil from the seeds of Helianthus annus is edible. A strong, aromatic essential oil, used in perfumery, is obtained from the seeds of Tagetus patula. Oil from the seeds of Xanthium strumarium is used as an illuminant

- **Dye**: A red dye safflower, obtained from Carthamus tinctorius, is used for colouring candles, butter, and several liquors.[3]

  Medicinal plants around 200 above from Asteraceae family are using to treat different ill health problems from ancient times to till now in all systems of medicine.

HOMOEOPATHIC PHARMACY

Homoeopathy is an art, a science, and philosophy that analyses disturbances in the human experience from a vitalistic, and individualistic view point. When a substance in it gross form produces an ailment, doesn't it when refined, produce relief of the same ailment?" (Shrimad Bhagavata Mahapurana).[4]

Homoeopathy is based on the fundamental principle Similia Similibus Curentur (like cures like) invented by Dr Samuel Hahnemann. Hahnemann's greatest contributions, in relation to pharmacy are the principle of Dynamization, the use of the single remedy (mono pharmacy) and Drug proving. Hahnemann did not write a separate book on homoeopathic pharmacy, but guidelines given in 6th edition of Organon of Medicine from Aphorisms 264 – 285. In Aphorism 3, he writes- '… as also in respect to the exact mode of preparation and quantity of it required (proper dose) and the proper period of repeating the dose'. Homoeopathic drug proving mentioned from Aphorism 105 to 145.[5]

The drugs proved on healthy human beings, their symptoms recorded and documented in Materia Medica is useful for selecting similimum. Homoeopathy, on its own responsibility, claims the right of using and arranging its own building material. For this reason one homoeopathic pharmacopoeia suffices for all countries.

Homoeopathic pharmacy – Compositae medicinal plants

Around 70 – 80 homoeopathic drugs are preparing from 3 subfamilies of Asteraceae family. The Homoeopathic drugs 3 sub families of Asteraceae family are as follows:

Table-1

SUB FAMILY	TRIBE	HOMOEOPATHIC DRUGS
1. Asteroideae (Cass.) Lindl. (1829)	a.Anthemideae Cass. (1819)	• Abrotanum • Absinthium • Anthemis nobilis • Anthemis vulgaris • Artemisia contra & Judaica • Anthemis pyrethrum • Artemisia vulgaris • Chamomilla • Chrysanthemum leucanthemum • Cina • Millefolium • Santolina chamaecyparissus • Santolin • Tanacetum vulgare
	b.Astereae Cass. (1819)	• Bellis perennis • Erigeron canadensis

		• Grindelia robusta • Grindelia sqarrosa • Haplopappus baylahuen • Solidago virgaurea
	c.Calenduleae Cass. (1819)	• Calendula officinalis
	d.Eupatorieae Cass. (1819)	• E.aromaticum • E. ayapana • E.cannabinum • E. perfoliatum • E. purpureum • Gauco • Liatris spicata
	e.Gnaphalieae (Cass.) Lecoq. & Juillet (1831)	• G. leontopodium • G. polycephalum • G.uliginosum
	f.Heliantheae Cass. (1819)	• Ambrosia artemisia folia • Calea zacatechichi • Echinacea angustifolia • Echinacea purpura • Eclipta alba • Helianthus annus • Helianthus tuberosus • Parthenium • Rudbeckia hirta • Silphium laciniatum • Spilanthes oleracea • Wyethia helenioides • Xanthium spinosum • Pyrethrum parthenium
	g.Inuleae Cass. (1819)	• Blumea odorata • Inula helienium

	h.Madieae Jeps. (1901)	• Arnica montana
	i.Millerieae Lindl. (1929)	• Galinsoga parviflora • Siegesbeckia orientalis • Plumbago littoralis
	Senecioneae Cass. (1819)	• Brachyglottis repens • Cineraria maritima • Erechthites hieracifolia • Petasitis hybridus • Tussilago farfara • T. fragrans • T. petasitis • Senecio aureus • S. jacobaea
2.Carduoideaep.p. Cass.ex Sweet (1826)	Cardueae Cass. (1819)	• Carduus Benedictus • C. marianus • Centaurea tagana • Cirsium arvense • Cynara scolymus • Lappa articum • L. major • Onopordum • Sassurea lappa
3. Cichorioideae (Juss.) Chevall. (1828)	a.Cichorieae Lam. & DC.(1806)	• Cichorium intybus • Lactuca sativa • L. virosa • Nabulus serpentaria • Taraxacum officinale • Lapsana communis
	b.Vernonieae Cass. (1819)	• Vernonia anthelmentica

Pharmacopoieas – AHP, BHP, HPI, BRIZALLIAN HP, EHP, HPUS, HOMOEOPATHIC POLYGLOTTICA, GHP COMPILED EDITION etc,

Materia Medica books like Allen's Encyclopedia of Materia Medica, Hering Guiding Symptoms, Materia medica pura, Lotus Materia medica by Robin Murphy, Kent Materia medica, Expanded works of Nash, Ghose, drugs of Hindoosthan, Hale new remedies, O.A. Julian 131 new remedies, Boericke Materia medica & Repertory, Benerjee, Matria medica of Indian drugs, Black wood Materia medica, Therapeutics & Pharmacology 1959, Index of German Homoeopathic Pharmacopoiea.

Text book of Homoeopathic Pharmacy by Benarjee.d.d; 6thedition Organon of Medicine; Text book of pharmacy by Mandal & Mandal, Dr, Sumit Goel Homoeopathic Pharmacy; different Botany books.

ANTHEMIDEAE TRIBE

1. ABROTANUM

Fig. 3 Abrotanum

Botanical name: Artemisia abrotanum (Tourn Neck; Artemisia procera Willd. **Common name**: Southernwood, Old man, Lad's love. **Part used:** Fresh Leaves and young shoots. **Distribution:** Great Britain; Europe-particularly Southern Europe. Cultivated for its fragrant foliage. **Identification:** An ever green under shrub with upright stem, 1- 1.5 meter high; puberulent twigs; flowers yellow appearing July to Oct; panicle inflorescence; fruit broadest at the truncate summit. The taste is burning, sharp and bitter; the odor aromatic mixed with that of lemons.

History: Named for Artemis, one of the names of Diana; accord ing to Pliny, named for Queen Artemisia. The abrotanum signifying immortal, as a preservative of life. It is used in making beer. It was used in the Eastern countries as a moxa for the cure of gout. **Preparation**: **HPI VI, V9 & EHP V 1**- For 1000ml Q with drug strength 1/10, take Abrotanum in moderately coarse powder 100 g, purified water 233 ml, strong alcohol 794 ml; Abrotanum ad usum externum - fresh leaves with 6 parts of strong alcohol for Q.

Potencies: 2x with dilute alcohol; 3x &higher with dispensing alcohol **Old method** – Class III (1/6)

Battacharya H P & HPUS - 1000Cc Q, 1/10, take A. abrotanum pulp 333g (containing solids 100g, plant moisture 233Cc), strong alcohol 794Cc. Potencies: 2x &higher with dispensing alcohol. **Old method** – F.3., **AHP-** Class III, D.S 1/6. **Dose**: Q & all potencies, third to thirtieth potency. **Planets**: Saturn, Moon.

2. ABSINTHIUM

Fig. 4 Absinthium

Botanical name: Artemesia absinthium Linn., Absinthium vulgare Lam., Artemesia officinalis Gater. **Common name**: Wormwood, Absinth, Maderwort, Mugwort, Mingwort. **Part used:** Leaves and flowers. **Distribution:** Kashmir (1500- 2100 m), Afghanistan, Europe, Algeria, United states, South Siberia, North Africa. **Identification:** Perennial deciduous herb, 30 – 120 cm high; stem erect, ribbed, with whitish or greyish green silky hairs; winged petioles; flowers yellow; fruit achene, elliptic, oblong or ovoid and 1mm long; flowers from July through September. Taste very bitter; odor strong and root-like. **Preparation: HPI V2 &EHP V1-**To prepare1000ml of Q, Absinthium coarse powder 100 g, purified water 333 ml, strong alcohol 700 ml needed. **Battacharya HP & HPUS**

– For 1000Cc, 1/10**,** take pulp of leaves 333 g which contain (solids 100 g, plant moisture 233 ml), purified water 100 ml, strong alcohol 700 ml; **old method** - F.3. **Potencies**: 2X is prepared by taking 1 part Q, 2 parts purified water, 7 parts strong alcohol. 3x & higher with dispensing alcohol**. Dose**: Q & all potencies, first to sixth potency. **Planets**: Moon. **Old method**: **AHP**- Class III

3. ARTEMISIA VULGARIS

Fig. 5 Artemisia vulgaris

Botanical name: *Artemisia vulgaris Linn.*, *Artemisia heterophyllus Nutt., A. indica willd.*

Common name: Mug wort, Worm wood.

Part used: The roots (collected in dry season) taking care not to wash them.

Habitat: Europe, Canada & states, found in waste places, on banks of streams, road sides, near dwellings, common in mountainous region of India up to 2000m.

Identification: A perennial, aromatic, shrub like herb with creeping root; stem furrowed; sub-secund spike like inflorescence; achenium minute; flowers July to October.

Preparation: **HPI V1, V9 & EHP V1**- To prepare 1000ml Q, drug strength 1/10 take A. vulgaris In coarse powder 100 g, purified water 333 ml, strong alcohol 694 ml. **Old method** – Class III (AHP)

BATTACHARYA HP& HPUS- Take A. vulgaris pulp (containing solids 100 g, moisture content 233 Cc) 333 gm, distilled water 100Cc, strong alcohol 694Cc to prepare 1000 Cc Q. **Old method**- F.3. Class III(AHP), **Polyglottica**- §3

Potencies: 2X to contain 1 part Q, 2 parts distilled water and 7 parts alcohol; 3x & higher with dispensing alcohol. Dose- 3x & higher. Q to all potencies, first to 3rd potency. Locally and internally injurious to eyes. **Planets** : Moon

4. CINA

Fig. 6 Cina

Botanical name: *Artemisia maritima Linn., Absinthium austriacum tenuifolium., Artemisia austriaca Jacq., A. contra L., A. cina Berg., Semen contra., A. santonica* (British H P).

Common name: Wormseed, Sea worm wood seed, Tartarian southern-wood, European Wormseed. Levant Wormseed.

Part used: Flower heads.

Habitat: In temperate region, western Himalayas.

Identification: Ever green perennial shrub; clusters of spreading erect partly woody stem; long leafy branched inflorescence; yellow, yellowish orange & pale brown florets; flower head ovoid, sessile, flowering September. Santonin is the active principle of unexpanded flower heads of cina known as Santonica. They have a peculiar, nauseous, aromatic odor, which is somewhat like that of camphor, and a rough, loathsome, bitterish taste.

History: This medicine is said to have been introduced into Europe by the Crusaders as an anthelmintic, but was not so much. used after the discovery and isolation of the proximate principle, Santonin.

Preparation:

HPI V 1& 9 – For Q, 1000ml,1/10, take Cina in moderately coarse powder 100g, strong alcohol in sufficient quantity

. **Potencies** - 2x and higher with dispensing alcohol.

Triturations: To prepare 1x trituration take 100 g Cina, 900 g Saccharam lactis to make 1000g of trituration. **Potencies** - 2x & higher according to method; 6x to 8x liquid preparation & 9x and higher with dispensing alcohol; **old method** - Class IV– HPI

HPUS, EHPV1/ Battacharya HP - Cina 100g, strong alcohol 1000Cc /1100Cc to prepare 1000Cc Q. **Potencies** - 2X and higher with dispensing alcohol, medications 1x and higher, trituration 1x and higher. Old method – F.4, AHP-Class 4

Polyglottica- §4, dried flower. Dose: Tincture and all potencies, third potency, for nervous irritable children, 30^{th} & 200^{th} preferable. Planets- Moon

5. ANTHEMIS NOBILIS

Fig.7 Anthemis nobilis

Botanical name: *Anthemis nobilis Linn., Anthemis aurea*., *Chamomilla nobilis*., *Ormenis nobilis*.

Common name: English Chamomile, Roman Chamomile, True chamomile.

Part used: Flower head. HPUS& BATTACHARYA H P - The whole fresh plant beginning to flower.

Habitat: England, found in France, Spane, Italy & some other parts of Southern Europe.

Identification: Perennial, branched, pubescent, procumbent herb; leaves downy, sessile; hemispherical heads of white or buff-coloured flowers; solid conical receptacle bearing paleae with numerous ligulate flowers; strong aromatic bitter taste. Flowering time June to September. **History-** It has been used as a domestic remedy since the 16th century. In the cultivated plant the ligulate florets predominate over or replace entirely the tubular ones. Minute oil glands are sparingly scattered over the tubular parts of both kinds of florets. The whole plant has a strong aromatic odor and bitter taste.

Preparation: **HPI V3, EHP V1** - For 1000 ml Q take A. nobilis in coarse powder 100 g, purified water 300 ml, strong alcohol 730 ml. **Prescribed dose-** 3rd potency.

HPUS, BATTACHARYA HP – For 1000Cc, 1/10, take Anthemis moist magma 400gm (solids 100gm, plant moisture 300Cc), Strong alcohol 730Cc. **Dose** – 3x and higher. Old method- F.3, Class III(AHP), **Polyglottica**- §3

Potencies- 2X to contain 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3X & higher with dispensing alcohol. Dose- Tincture and all potencies,3rd potency. Planets- Moon

6. ANTHEMIS PYRETHRUM

Fig. 8 Anthemis pyrethrum

Botanical name: *Anacyclus pyrethrum D.C., Matricaria pyrethrum Baill.*, *Anthemis pyrethrum L.*

Common name: Pellitory, Spanish chamomile, Mount Atlas daisy, bertram, or Akarkara

Part used-Root.

Habitat: Mediterranean countries.

I**dentification**: Perennial herb, root dark brown, cylindrical pieces, tapering slightly to either end, pungent acrid taste causing a flow of saliva. Flowers blooming spring to early summer.

Preparation: EHP V1 - For Q, 1/10, 1000ml, take A. pyrethrum magma 420gm containing solids 100gm& moisture/purified water 320ml, strong alcohol 720ml; **Potencies**: 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 2x & higher with dispensing alcohol. **Prescribed dose** – 3x & higher,

7. CHAMOMILLA

Fig. 9 Chamomilla

Botanical name: *Matricaria chamomilla Linn*., *Chamomilla vulgaris*., *Anthemis vulgaris* (Brazilian H P)., *Anthemis nobilis Linn*., *Chamaemelum vulgaris*., *Chamomilla nostras., Chamomilla officinalis K. Koch*, *Leucanthemum.*

Common name: Bitter Chamomile, German Chamomilla, Wild chamomile, Corn Fever few.

Part used: Fresh whole plant or Dried whole plant in flowering.

Habitat: India, Asia & Europe.

Identification: A branched, annual herb up to 60cm; leaves tripinnate below, bipinnate with filiform above; pale yellow tubular disc florets, white ligulate florets; conical or hallow receptacle; 3-5 ribbed achene, devoid of pappus; flowering May to Aug. It is distinguished from Roman chamomile by its perennial stalk, its chaffy receptacle, its hollow peduncles, the green scales of the calyx &

by its rays being mostly turned in. **History**- Chamomilla, from chamamelum, matricaria, from matrix. It has been in use long and extensively as a domestic remedy.

Preparation: **HPI V1, V5** - To prepare 1000ml Q take Chamomilla moist magma (containing solids 100g & plant moisture 500ml) 600 g, strong alcohol 537 ml. **Old method**- Class 1 (AHP)

EHP V1- Take 100 g Chamomilla coarse powder, purified water 500ml, strong alcohol 537ml to prepare 1000ml Q. **Prescribed dose**- 3rd to 30th attenuation.

HPUS/ BATTACHARYA HP- 1000Cc, 1/10, take chamomile moist magma 400g (solids 100 gm, plant moisture 300Cc), Distilled water 200Cc, Strong alcohol 537/507Cc. **Dose**- 3x & higher. **Old method**- F.1.

Potencies- 2X to contain 1 part Q, 4 parts purified water & 5 parts strong alcohol; 3X & higher with dispensing alcohol.

Polyglottica- §1 **Dose**- Tincture and all potencies, 3rd to 30th potency. Planets- Mercury and Mars.

8. CHRYSANTHEMUM LEUCANTHEMUM

Fig. 10 Chrysanthemum leucanthemum

Botanical name: *Chrysanthemum leucanthemum Linn*., *Leucanthemum leucanthemum small*., *Leucanthemum vulgare Rydb*.

Common name: Ox- eye daisy, White weed, White daisy.

Part used: Whole plant

Habitat: Europe, Asia, North America, common on road sides, in fields, from Labrador to British Columbia, South to Florida, Kentucky, Missouri, Kansas, etc.; also in Bermuda.

Identification: Perennial herb, 3-9 mm high, numerous stems arising from a single rootstock, tufted plant; solitary flowering head with naked peduncles; 20-30 white rays, 2-3 toothed, radiating from a depressed central disk of numerous small yellow, tubular flowers; flowering May through November.

Preparation: **EHP V1**- For 1000 ml Q with 45% alcohol content take C. leucanthemum 100 g, purified water 550 ml, strong alcohol 470 ml. **Potencies**- 2X to contain 1 part Q, 4 parts purified water & 5 parts of strong alcohol; 3X & higher with dispensing alcohol. **prescribed dose**- 1x & higher, Tincture to all potencies. **Planets-** Moon.

9. MILLEFOILIUM

Fig 11 Millefolium

Botanical name: *Achillea millefolium Linn*., *A. lanulosa Nutt Achillea*., *Achillea alba., A. millefolium.*

Common name: Yarrow, Nose bleed; Indian- Rojamari, Rosemery, Biranjasif, Milfoil.

Part used: Whole plant

Habitat: In Western Himalayas especially around Simla, indigenous to North Asia, Europe & America.

Identification: Erect, pubescent herb; stem 15cm – 62cm, leafy grooved; radiate heads crowded in compound corymbs; flat receptacle; fruit achenes oblong, flattened, shining, no pappus; outer short involucral bracts. Flowers from June to October. Name, achillea, from Achilles, who is said to have applied it to wounds.

Preparation: **HPI V4, EHP V2/ HPUS, BAT TACHARYA HP** - To prepare 1000 ml/1000Cc Q take Millefolium, moist magma 300g (containing solids 100 g, plant moisture 200ml/Cc), Purified water 200ml/Cc, Strong alcohol 635ml/Cc. **Potencies** - 2X to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3X & higher with dispensing alcohol. **prescribed dose**- Q to 3rd potency / 3x & higher. **Old method** – F.1. **AHP**- Class 1. **Planets-** Mars, Moon

10. SANTOLINA CHAMAECYPARISSUS

Fig12 Santolina chamaecyparissus

Botanical name: *Santolina chamaecyparissus Linn.*

Common name: Lavender cotton.

Part used: Whole plant gathered during flowering.

Habitat: Native of Mediterranean region; grown as an ornamental plant on the hills of Southern India.

Identification: Tomentose, pubescent, under shrub, white wooly young shoots; silvery gray leaves, juicy, inulin is present in cell sap of parenchyma; solitary small heads; flowers all tubular, yellow, scarious involucral bracts; fruit 3-5 angled, no pappus. Blooming from June to August.

Preparation: **EHP V3, HPI V9** - To prepare 1000 ml Q take S. chamaecyparissus coarse powder 100 g, Plant moisture/Purified water 300 ml, Strong alcohol 736ml/725 ml. **Prescribed dose**- 1x & higher.

Potencies- 2X to contain 1 part Q, 2 parts purified water & 7 parts strong alcohol; 3X & higher with dispensing alcohol.

11. TANACETUM VULGARE

Fig .13 Tanacetum vulgare

Botanical name: *Tanacetum vulgare Linn.* **Synonym**- Athanasia.

Common name: Tancy, Common or double tancy.

Part used: Leaf & flowering twig.

Habitat: United States & Europe.

Identification: Perennial, stout rhizome, winged rachis; discoid head, yellow flowers dense terminal corymbs; pappus a minute crown, almost obsolute; flowering July to October. The whole plant has a strong, disagreeable odor, and a bitter, aromatic taste.

Preparation: **HPI V, EHP 3**- To prepare 1000ml Q take T. vulgare 100g, purified water 350ml, strong alcohol 687ml. **Prescribed dose-** Q to 3rd potency.

HPUS, BATTACHARYA HP- For 1000Cc, 1/10 take Tanacetum moist magma 450 (solids 100gm, plant moisture 350Cc), Strong alcohol 687Cc/ 637Cc. **Dose-** 3x & higher. **Old method** – F.3., **AHP**- Class III.

Potencies- 2X to contain 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3X & higher with dispensing alcohol. Planets- Moon.

12. Anthemis vulgaris mentioned in Battacharya HP which is described under Chamomile & **Artemisia Judaica and contra (**see cina) given in Clarke Materia medica.

ASTEREAE TRIBE

13. BELLIS PERENNIS

Fig .14 Bellis perennis

Botanical name*: Bellis perennis Linn., Bellis alpina Hegetschw., B. hortensis Mill., B. hybrida Tenore., B. integrifolia DC., B. scaposa Gilib.*

Common name: Daisy, English daisy, Garden daisy, Hen and chickens

Part used: Whole plant

Habitat: Britain; cultivated in India

Identification: Perennial herb; leaves tuft base, spathulate, obovate, slightly toothed, pubescent, midrib broad; flowers hairy peduncles, involucral bracts oblong, obtuse hairy, white or rosy, wholly or partly red linear, numerous flowers, appearing in spring & summer (March – August); short, fibrous & stout root stock; taste intense pungent, slightly acidic, develops 2-3 min after chewing on sides of the upper half of the tongue & palate.

Preparation: HPI V1, V9- To prepare 1000ml Q take Bellis perennis in coarse powder 100 g, purified water 350 ml, strong alcohol 683ml.

EHP V 1 / HPUS/ BATTACHARYA HP - Take fresh pulp containing solids 100g, plant moisture 350Cc (450 gm), strong alcohol 683Cc to obtain 1000Cc Q. **Dose** – 3x & higher OR Q and all potencies, Q to 30c. For external use , 2 tea spoon - fulls of the Q are diluted in half a liter of water, for compresses. **Old method** – F.1.

Potencies - 2X to contain 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3X & higher with dispensing alcohol. **Old method** - Class 1(d.p.½) – A.H.P.

Polyglottica- Fresh plant in flower, §1 **Planets**- Mars, Saturn

14. ERIGERON CANADENSE

Fig .15 Erigeron

Botanical name: *Erigeron canadensis Linn. (er , spring, and geron, an old man, suggested by its hoary appearance in the spring.)., Erigeron paniculatus., E. pusillus., E.strictum*.

Common name: Canada fleabane, Blood stanch, Butter hoarse weed, Butter weed, Colt's tail, Fleabane, Horse weed, Mare's tail, Pride weed, Scabious, Leptilon canadense.

Part used: Whole plant.

Habitat: Western Himalayas, Punjab, Shillong, Nilgiris up to 2000m, vallys in Kashmir up to an 1500m.

Identification: Indigenous annual plant; stem bristly ,6 feet high, hairy, divided in to many branches; leaves linear- lanceolate, entire those at the root which are dentate; flowers oblong calyx, minute rays, appearing June & Oct; odour feeble, astringent taste, aromatic, bitter.

Preparation: **HPI V4 & HPUS/ BATTACHARYA HP** - To prepare 1000ml/ 1000Cc Q take Erigeron canadensis, moist magma containing solids 100 g,

plant moisture 233 ml/Cc i.e. 333 g, purified water 267ml /Cc, strong alcohol 537ml/Cc.

Potencies - 2X to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3X & higher with dispensing alcohol. Old method – F.3., class III (1/6). **Prescribed dose:** Q – 3rd potency, oil of erigeron 1x internally for tympanitis; an enema of 1 dram of the oil with the yolk of an egg & pint of milk will reduce the most enormous tympanitis. **Planets**- Moon, Venus

15. GRINDELIA ROBUSTA (named for Grindel, a German botanist.)

Fig.16 Grindelia robusta

Botanical name: *Grindelia camporum Green., Gridelia robusta Nutt., Grindelia latifolia.*

Common name: Gum plant, Wild Sunflower, Broad gum plant.

Part used: Leaves & flowering tops (unexpanded).

Habitat: South Western United States.

Identification: Perennial herb with smooth, stout, pale stem; leaves rigid, broadly cordate oblong, sessile; achenes bordered at the summit; all parts are covered with resin, slight odour, balsamic taste; single row of yellow, ligulate ray florets with in the recurved bracts & central tubular disc florets, appearing in May continuing several months.

Preparation: **HPI V3&V9, EHP V2** - To prepare 1000ml Q take G. robusta in coarse powder 100 g, purified water 150 ml, strong alcohol 877ml. **Prescribed dose**- Q in 1- 15 drops, also lower potencies.

HPUS/ BHATTACHARYA HP - For 1000Cc take pulp 250 g containing 100g solids & plant moisture 150Cc, strong alcohol 877ml.**Old method** – F.3. G.H.P.F.4.

Potencies - 2X& higher with dispensing alcohol. antidote to Rhustox poisoning locally & internally. **Old method** – Class 3 (1/6)- AHP**. Planets**- Saturn.

16. GRINDELIA SQUARROSA

Fig. 17 Grindelia squarrosa

Botanical name: *Grindelia squarrosa Dunal.*

Common name: Gum plant, Snake headed Grindelia.

Part used; Whole plant with flowers. Do not remove or wash the resins.

Habitat: North America.

Identification: Perennial herb, snake headed leaves and flowers, glabrous from a varnish-like exudation. Flowering time mid- summer to early autumn.

Preparation: EHP V2 - To prepare 1000ml Q take G. squarrosa in coarse powder 100g, purified water 260ml, strong alcohol 750 ml. **Potencies** - 2X to

contain 1 part Q,3 parts purified water, 6 parts strong alcohol; 3X& higher with dispensing alcohol. **Prescribed dose** – 1x and higher.

HPUS/BHATTACHARYA HP - Take G. squarrosa flowers pulp containing solids 100g & moisture 150Cc i.e. 250gm, strong alcohol 877Cc to prepare 1000Cc. **Dilutions** – 2x and higher with dispensing alcohol. **Old method** – F.3.

AHP Preparation – Class III, 1/6. **Planets:** Saturn

17. HAPLOPAPPUS BAYLAHUEN

Fig.18 Haplopappus baylahuen

Botanical name: *Haplopappus baylahuen Remy., Aplopappus baylahuen Remy.*

Common name: Bailahuen

Part used: Dried leaves.

Habitat: Chile.

Identification: Perennial or biennial, small herb; involucral scaly, present in several whorls; dentate or bidentate, sessile leaves, midrib lighter in colour & slightly brownish yellow; fruit terete, silky, unequal numerous pappus, rigid, scabrous bristles; mildly pungent & odourless. Blooming time is spring.

Preparation: EHP V2- To prepare 1000ml Q take H. baylahuen in coarse powder 100gm purified water 283ml, strong alcohol 754ml. **Potencies**- 2X & higher with dispensing alcohol. **Dose –** 3x & higher.

18. SOLIDAGO VIRGAUREA

Fig.19 Solidago virgaurea

Botanical name: *Solidago virgaurea Linn., Solidago virgaurea var. alpina Bigel.*

Common name: Goldenrod.

Part used: Flowering top.

Habitat: Alpine districts of North New England, Northern United States & Europe'

I**dentification**: A deciduous, perennial herb; oblique thin rhizome; radical leaves, slightly serrate, cauline ones lanceolate, sessile or narrowed into marginal petioles; dense, interrupted thyrsoid, acute to acutish involucral bracts, greenish yellow. Flowers July – Sep. Aromatic odour, bitterish, astringent taste.

Preparation: **HPI V 5/ HPUS -** To prepare 1000ml/ 1000Cc Q take S. virgaurea in coarse powder 100gm or moist magma 400g (containing 100gm, plant moisture 300Cc), purified water 400ml/ 100Cc, strong alcohol 635ml/ Cc. **Potencies-** 2X to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol;

3X & higher with dispensing alcohol. **Dose**- 3x & higher, Tincture and all potencies, 30c potency or higher. **Old method**- class III, 1/6(AHP) F.3. (BHATTACHARYA HP). **Planets**: Venus, Mercury

CALENDULEAE TRIBE

19. CALENDULA OFFICINALIS

Fig. 20 Calendula

Botanical name: *Calendula officinalis L.*, (Named because it flowers during the calends of each month.)., *Caltha officinalis., C. sativa., C. vulgaris., Flosomnium mensium., Solseginum aureum., Solis sponsa., Verrucaria.*

Common name: Scotch or Pot Marigold, Garden Marigold.

Part used: Fresh flower in top & leaf.

Habitat: Europe, cultivated in India.

Identification: Annual herb, stem with bushy branches, green, succulent; flowers yellow orange, summer, fall, closing towards night; mucilaginous & have a disagreeable odour; named calendula because it flowers during the calends of each month; flowers all the summer (March- May).

Preparation: **HPI V1, V10/ EHP V1, HPUS, BHATTACHARYA H P** - To prepare 1000ml / Cc Q take C. officinalis, moist magma containing 100gm, plant moisture 600 ml / Cc – 700 ml/Cc, strong alcohol 437 ml/Cc. **Potencies**- 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3X & higher with dispensing alcohol. **Old method** – F.1.; Class I, ½ **AHP**) Q of dried root, fresh plant, its flowers with proof spirit (**British H P**). **Medication** - 3x & higher/ Aqueous calendula for all wounds, in leucorrhoea and cerate for burns, sores, fissures, abrasions; internally Q to 3rd potency; use Calendula Cerate. Calendula 30c or 200c after surgery. Planets: Mars

Polyglottica – Herb in bloom, §1

EUPETORIEAE TRIBE

20. EUPATORIUM AROMATICUM

Fig. 21 Eupatorium aromaticum

Botanical name: *Eupatorium aromaticum Linn.*

Common name: White snake root, Pool root.

Part used: Root.

Habitat: Massachussets to Florida in U.S.A.

Identification: Perennial, deciduous herb. Stem with loosely corymbs at the summit; white aromatic flowers July to Sep.

Preparation: **HPI V7/ EHP V2 -** To prepare 1000ml Q take E. aromaticum 100gm, purified water 500ml, strong alcohol 537ml. **Dose**- Q locally in sore mouth & sore nipples, internally Q to 3rd attenuation.

HPUS/ BATTACHARYA H P- Take moist magma 333Cc containing 100gm solids, plant moisture 233Cc, distilled water 267Cc, strong alcohol 537Cc - obtain 1000Cc Q. **Old method** – F.3; Dose- 3x & higher.

Potencies- 2X to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3X & higher with dispensing alcohol. **Old method**- Class III, 1/6(AHP). **Dose**- Q to all potencies,Q, locally in sore mouth and sore nipples, QQ to 3rd potency. **Planets**- Moon

21. EUPATORIUM AYAPANA

Fig. 22 Eupatorium ayapana

Botanical name: *Ayapana officinalis Spach, Eupatorium ayapana Vent, Eupatorium luzoniense Llanos, Eupatorium triplinerve Blume, and Eupatorium triplinerve Vahl.*

Common name: Nirbisha, Vishalyakarani. Synonyms: Ayapana, Alleppa.

Part used: The fresh leaves.

Habitat: Indian gardens & America.

Identification: Small, ascending, branching, aromatic shrub; leaves sub-sessile, three nerved; flowers are bluish, regular, tubular.

Preparation: BATTACHARYA HP/ EHP V 2 - Take ayapana fresh leaves containing solids 100gm & drug moisture 200Cc/ml i.e. 300gm, purified water 200Cc/ml, strong alcohol 635Cc/ml, obtain 1000Cc/ml Q. **Potencies**- 2X to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3X & higher with dispensing alcohol. **Prescribed dose** – 1X & higher.

22. EUPATORIUM CANNABINUM

Fig. 23 Eupatorium cannabinum

Botanical name: *Eupatorium cannabinum Linn.*

Common name: Dutch agrimony.

Part used: Whole plant.

Habitat: Banks of rivers & streams, in damp places throughout Europe & England.

I**dentification**: A perennial herb, 0.6-0.9m high; reddish green stem; three lobed serrated leaves; flowers dull lilac colour at the top of the stem, crowded, blooms in late summer & autumn; has strong odour, very bitter taste.

Preparation: **EHP V2-** To prepare 1 litre Q take E. cannabinum in coarse powder 100gm, purified water 330ml, strong alcohol 700ml. **Potencies**: 2X to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3X & higher with dispensing alcohol. **Prescribed dose**- 1x & higher.

23. EUPATORIUM PERFOLIATUM

Fig. 24 Eupatorium perfoliatum

Botanical name: *Eupatorium perfoliatum Linn., E. connatum Michx., E. salviaefolium., E. virginicum.*

Common name: Indian Sage, Cross wort, Sweating plant, Ague weed, Bone set, Fever wort, Indian sage, Joe-pye, Sweating plant, Teasel, Thorough root, Thorough wax, Thoroughwort, Vegetable antimony.

Part used: Leaves & tops while in flower.

Habitat: North America.

Identification: A deciduous, perennial herb, 1.3 m high; leaves opposite, united at the base of the stem – connate- perfoliate; flowers purplish white, 30-40 flower heads, axillary & terminal cymes, appear July to Oct.

Preparation: **EHP V2, HPI V1-** To prepare 1000ml Q take E. perfoliatum in coarse powder 100gm, purified water 500ml, strong alcohol 537ml. **Old method** – Class III.

HPUS, BATTACHARYA HP - To prepare 1000Cc Q take 400Cc magma containing 100gm solids, 300Cc moisture, distilled water 200Cc, strong alcohol 537Cc. **Old method**- Class III, 1/6 9 AHP); F.3.

Potencies- 2X to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3X & higher with dispensing alcohol. **Old method**- Class III, 1/6; F.3. **Prescribed potency** – Q to 3rd potency, 3x & higher. Planets- Mars, Saturn.

24. EUPATORIUM PURPUREUM

Fig .25 Eupatorium purpureum

Botanical name: *Eupatorium purpureum Linn., Eupatorium maculatum., E. ternifolium., E. trifoliatum., E. verticillatum.*

Common name: Trumpet weed, Queen of the meadow, Gravel root, Joe-pye, Joe- pye weed, Purple boneset.

Part used: Root.

Habitat: North America, Cannada to Florida.

Identification: Fibrous rooted, root black & bitter, perennial, 2m high; stem slightly glaucous purple at nodes; convex inflorescence, imbricate involucre, corolla very pale pinkish or purplish, flower Aug – Oct, collect when the herb is dying down, in autumn.

Preparation: EHP V2, HPI, Q, 1/10 ,1000ml / 1000Cc (**HPUS, Battacharya H P)** take E. perpureum in coarse powder 100gm / moist magma- 333gm (solids 100gm, Plant moisture 233ml; Purified water 500ml/ 267Cc; Strong alcohol 537ml / 537Cc.

Potencies- 2X to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3X & higher with dispensing alcohol. **Prescribed dose**- 1st potency; 3x & higher; Q to 1, tincture only, 3x and higher, tincture, pilules or globules. **Old method-** Class III, F.3.

BRITISH HP- Q using proof spirit, or triturations of Keith's Eupurpurin. Planets- Venus

25. GUACO

Fig. 26 Guaco

Botanical name: *Mikania amara Willd., Mikania Quaco Humb. And Bonpl., Mikania guaco., Humboldt and Bonpland*

Common name: Climbing Hemp (bemp) weed.

Part used: Leaf.

Habitat: North & South America specially in Venezuela, Columbia & Jamaica.

Identification: A herbaceous shrubby, climbing plant with round – furrowed, hairy branches; leaves unicostate, petiolate, rough above, hairy beneath; pale rusty pappus;

Preparation: EHP V2, HPI V7/ BHATTACHARYA H P- Q, 1/10, 1000ml/Cc, take Guaco, moist magma containing 100gm solids & plant moisture 300ml/Cc (400gm/Cc), strong alcohol 730 ml/Cc.

Potencies- 2X 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3X & higher with dispensing alcohol; triturations- 1x and higher; **old method** F.3.; F.4.(GHP); class III,1/6 (AHP). **Prescribed dose:** 1x & higher; 3rd to 6th potency.

Planets- Mars

26. LIATRIS SPICATA

Fig . 27 Liatris spicata

Botanical name: *Liatris spicata Willd., Serratula spicata L.*

Common name: Gayfeather, Dense blazing star, Dense button-snakeroot, Devil's bit, Colic root

Part used: Root.

Habitat: Meadows, borders of marshes, savannas, damp slopes etc., from Florida to Louisiana, Island, Northern New Jersy, Southern New England & New York.

Identification: Perennial herb, arising from bulb like, fibrous coated rhizome; flower heads, bell shaped, rose purple, July through Sep; 10 ribbed achene, slender, pappus- plumose bristles.

Preparation: **EHP V2**- Q, 1/10, 1000ml Take L. spicata in coarse powder 100gm, purified water 330ml, strong alcohol 700ml; 2X to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol.

Prescribed dose: 1-4 drams of Q of infusion locally applied to ulcers and unhealthy wounds. Planets- Jupiter

GNAPHALIEAE TRIBE

27. GNAPHALIUM LEONTOPODIUM

Fig. 28 Gnaphalium leontopodium

Botanical name: *Leontopodium alpinum Cass., Gnaphalium Leontopodium L.*

Common name: Edelweiss

Part used: Whole plant

Habitat: Sunny, rocky slope between 1700 & 3400m altitude in the mountains of Europe & Asia.

Identification: Perennial herb, 10-30cm high; creeping cylindrical rhizome; involucral bracts densely woolly with blackish tips; fruit is a one seeded achene.

Preparation: **EHP V2-** G. Leontopodium in coarse powder 100gm, purified water 540ml, strong alcohol 450ml to make 1000ml Q. **Potencies**- 2X to contain 1 part Q, 5 parts purified water, 4 parts strong alcohol; 3x & higher with dispensing alcohol. **Dose** – 1x & higher.

28. GNAPHALIUM POLYCEPHALUM

Fig. 29 Gnaphalium polycephalum

Botanical name: *G. obtusifolium Linn., G. polycephalum Michx., G. conoideum*.

Common name: Everlasting, Indian posey, Indian tobacco, Sweet-scented life-everlasting.

Part used: Whole plant.

Habitat: North America.

Identification: Annual, biennial, 75 cm high; pappus pilose; achenes glabrous; flowers July to Oct, yellow with numerous heads clustered at the summit.

Preparation: EHP V2, HPI - Q, 1/10, 1000ml take G. polycephalum in coarse powder 100gm, purified water 500ml, strong alcohol 537ml.

HPUS/ BATTACHARYA HP - For 1000Cc G. polycephalum fresh pulp containing solids 100gm & dry moisture 185Cc (285Cc), distilled water 315Cc, strong alcohol 537Cc. **Old method** – F.3.

Potencies- 2X to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol. **Old method**: Class III, 1/6 (AHP). Dose: 3- 30th potency; 3x & higher. Planets- Mercury

29. GNAPHALIUM ULIGINOSUM

Fig .30 Gnaphalium uliginosum

Botanical name*: Gnaphalium uliginosum Linn.*

Common name: Low cudweed, Balsam weed, Life-everlasting, Live forever, Mouse ear, Old field balsam, Pearly everlasting, Seet balsam, White balsam.

Part used: Whole plant.

Habitat: Europe, Caucosia, Armenia, North America.

Identification: Annual, 25cm high; achenes papillate or smooth; yellow brown flowers appearing in small, terminal clusters subtended by leaves.

Preparation: HPUS, BATTACHARYA HP - Q, 1/10, 1000Cc take G. uliginosum fresh pulp containing solids 100gm & moisture 185Cc(285g), distilled water 315Cc, strong alcohol 537Cc;

EHP V2- For 1000ml take coarse powder 285gm, purified water 315ml, strong alcohol 537ml.

Potencies- 2X to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol. **Dose**- 1x & higher.

HELIANTHEAE TRIBE

30. AMBROSIA ARTEMISIIFOLIA

Fig. 31 Ambrosia artemisifolia

Botanical name: *Ambrosia artemisiaefolia Linn., A. absynthyfolia Michx., A. elatior L., Ambrosia absinthifolia., A. heterophylla., A. paniculata., Iva monophyla.*

Common name: Rag weed, Bastard wormwood, Carrot weed, Hogweed, Roman and wild wormwood, Mugwort leaved.

Part used: Whole plant.

Habitat: Canada to Brazil, in waste places everywhere.

Identification: Annual herb, 0.3- 1.0m high; flowers greenish-white appearing July -Oct. The leaves are thin, finely cut, opposite and alternating, twice pinnatifid, smooth above and hairy beneath.

Preparation: EHP V1- Q, 1/10, 1000ml take A. artemisiifolia (dry drug basis) 100gm, purified water / plant moisture 335ml, strong alcohol 685ml.

HPUS- For 1000Cc take pulp of the plant 600Cc containing solids 100gm & plant moisture 500Cc, strong alcohol 537Cc.

Potencies- 2X to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol ; 1 part Q, 4 parts purified water, 5 parts strong alcohol (HPUS); 3x & higher with dispensing alcohol. Dose: 1x-3x, 6 & higher in fever/ 3x & higher, 10drops in water during and after attack of nosebleed, in hay fever high potencies**. Planets**- Sun

31. CALEA ZACATECHICHI

Fig. 32 Calea zacatechichi

Botanical name: *Calea zacatechichi Schlecht.*

Common name: Bitter- grass, Mexican calea, Dream herb, Cheech.

Part used: Whole plant.

Habitat: States of San Luis Potosi, Jallsco, Veracruz, Puebla Morelos & Yucatan in Mexico.

Identification: Much branched shrub; small heads, dense umbellate cymose panicles, phyllaries without spreading tips.

Preparation: EHP V1- Q, 1/10, 1000ml take C. zacatechichi in coarse powder 100gm, purified water 400ml, strong alcohol 635ml.

Potencies- 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Dose-** 3x & higher.

32. ECHINACEA ANGUSTIFOLIA

Fig. 33 Echinacea angustifolia

Botanical name: *Echinacea angustifolia DC., Brauneria angustifolia Heller., Rudbekia pallida., Brauneria pallida.*

Common name: Narrow- leaved cone flower, Black Sampson, pale purple cone flower.

Part used: Whole plant.

Habitat: Found in America & Central Europe.

Identification: Erect perennial herb, 30-60 cm high; rays purple, 2 toothed at apex; fruiting disk.

Preparation: HPI V1, EHP V2- Q, 1/10, 1000ml take E. angustifolia coarse powder 100gm, purified water 200ml, strong alcohol 825ml.

BATTACHARYA HP- 1000Cc take plant fresh pulp 200gm containing solids 100gm & moisture 100Cc, distilled water 100Cc, strong alcohol 825Cc.

Potencies- 2X – 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3x & higher with dispensing alcohol. **Old method**: F.3.; class III, 1/6. **Prescribed dose-** Q, one to ten drops, every two hours, and larger doses. Locally as a cleansing and antiseptic wash. **Planets-** Mars, Saturn

33. ECHINACEA PURPUREA

Fig.34 Echinacea purpurea

Botanical name: *Echinacea purpurea L.) Moench., Rudbeckia purpure L.; Brauneria purpurea Britt.*

Common name: Black Sampson, Purple coneflower.

Part used: Whole plant.

Habitat: U.S.A. & Europe.

Identification: Perennial herb with tapering, cylindrical, slightly spiral, fibrous root; Disc initially flat & elongated into cone after flowering, orange red paleae,

reddish purple sterile ray florets, dark red or purplish brown, fertile disk florets with paleae projecting beyond them; fruit with short toothed crown.

Preparation: EHP V2, HPI V9- Q, 1/10, 1000ml take E. purpurea coarse powder 100gm, purified water 430ml, strong alcohol 580ml.

Potencies- 2x contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Prescribed dose**- 1x and higher. Potencies- Mars, Saturn

34. ECLIPTA ALBA

Fig. 35 Eclipta alba

Botanical name: *Eclipta alba (Linn.) Hassk., E. prostrata (Linn.) L.*

Common name: Trailing Eclipta.

Part used: Whole plant.

Habitat: Throughout India in shady moist places, up to 1700m on hills.

Identification: Branched annual rooting at nodes; strigose stem with appressed white hairs; flowers solitary or in pairs on unequal axillary peduncles, white non toothed ray florets, 4 toothed corolla disc florets; fruit tipped with ribbed pappus teeth, covered with wart emergences, flowers & fruit Aug to Nov.

Preparation: HPI V9- Q, 1/10, 1000ml take E. alba coarse powder 100gm, purified water 283ml, strong alcohol 754ml. **Potencies**- 2x contain 1 part Q, 2 parts purified water & 7 parts strong alcohol; 3x & higher with dispensing alcohol.

35. HELIANTHUS ANNUS

Fig. 36 Helianthus annus

Botanical name: *Helianthus annus Linn.*

Common name: Sunflower, Sun rose, Common sunflower. Indian- Surya Mukhi.

Part used: Mature flower head.

Habitat: India

Identification: Annual herb, hairy stem; single or double, terminal flower heads, receptacles by 4 rows of bracts, yellow ray florets surrounding a brown purple center of disc florets; fruit cylindrical, obovoid compressed, white, black or striped grey & black, pappus falling early. Flowering- July to August.

Preparation: HPI, EHP V2/ BATTACHARYA HP- Q, 1/10, 1000ml/ 1000Cc take H. annus, moist magma 333 gm containing solids 100 gm & moisture 233ml

/ Cc, purified water 267 ml / Cc, strong alcohol 537ml / Cc. AHP- Take ripe seeds coarse powder, 5 parts alcohol.

Potencies- 2x contain Q 1part, 4 parts purified water, strong alcohol 5 parts; 3x & higher with dispensing alcohol. **Old method** – F.4.; class IV, 1/10 (Dilutions except that the 2x & 3x, and the 1 and 2, require dilute alcohol.

Dose- 1x & higher. Planets- Sun, Saturn

36. HELIANTHUS TUBEROSUS

Fig.37 Helianthus tuberosus

Botanical name: *Helianthus tuberosus Linn.*

Common name: Jerusalem artichoke, Sunchoke, Sun root, Earth apple, Topinambur, Iroquois potato, Jerusalem sunflower, Indian potato, Girasole, and Tuberous sunflower.

Part used: Fresh tuber

Habitat: Canada to Georgia.

Identification: Tubers have an earthy odour & slightly aromatic taste. Fresh tubers collected in late autumn.

Preparation: EHP- Q, 1/10, 1000ml Take H. tuberosus 100 gm, purified water 500 ml, strong alcohol 570 ml.

Potencies- 2X contains 1 part Q, 4 parts purified water , 5 parts strong alcohol; 3X & higher with dispensing alcohol. **Dose**- Q

37. PARTHENIUM

Fig. 38 Parthenium

Botanical name: *Parthenium hysterophorous Linn.*

Common name: Congress grass

Part used: Whole plant

Habitat: Southern, Central America, An exotic weed in India.

Identification: A herb,1.0 m height; irregularly dissected leaves; white ray florets 5, white or light yellow, pistillate with bifid stigma, disc florets -style undivided; fruit achene broadly obovoid, dark brown; dried herbaceous bracts.

Preparation: HPI V7, EHP V3 - Q, 1/10, 1000ml take Parthenium – 400 gm (moist magma containing solids 100 gm & plant moisture 300 ml), strong alcohol 750 ml. **Potencies** - 2X & higher with dispensing alcohol. **Dose** – 3x & higher.

Planets- Moon

38. PYRETHRUM PARTHENIUM

Fig.39 Pyrethrum parthenium

Botanical name: Chrysanthemum parthenium (L) Bernh.; Pyrethrum parthenium Smith.; Matericaria parthenium L. Gren.

Common name: Fever few

Part used: Whole plant.

Habitat: Europe, Naturalised, widespread in waste places on roadsides & at borders of woods, from Quebec to Ohio, South to Mary land & Missouri, in California.

Identification : Perennial herb, bushy branched; flowering heads arranged in corymbs, ray flowers white, disc flowers yellow.

Preparation: **EHP V3** - Q, 1/10, 1000ml, take P. parthenium coarse powder 100gm, purified water 530ml, strong alcohol 500; 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol; caution should take because it causes dermatitis, to be handled carefully; **prescribed dose** – 3x & higher. **Planets**- Moon

39. RUDBECKIA HIRTA

Fig. 40 Rudbeckia hirta

Botanical name: *Rudbeckia hirta Linn.*

Common name: Corn flower, Great hairy Rudbeckia.

Part used: Whole plant with flowers

Habitat: USA

Identification: Bristly hairy plant, found in dry soil, rays longer than involucre, bright yellow in colour, conical disk, dark purplish brown chaft & flowers, June to August.

Preparation: EHP V3- Q, 1/10, 1000ml take Rudbeckia hirta 100 gm, purified water 400 ml, strong alcohol 635 ml. **Potencies-** 2X contains 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3X & higher with dispensing alcohol. **Old method –** Class III ,1/6- AHP.

Prescribed dose: 1X & Higher.

40. SILPHIUM LACINIATUM

Fig. 41 Silphium laciniatum

Botanical name: *Silphium laciniatum Linn.*

Common name: Compass plant (lower end root leaves are vertical, 12-30 inches long, ovate on the open prairies tend to present their edges north & south, hence the name). Rosin weed, Pilot weed. **Part used**: Whole plant (HPI), Flower (AHP). **Habitat:** Western USA.

Identification: Woody tap root containing resinous juice ; hispid of hirsute stem with spreading hairs; leaves hirsute chiefly along the mid rib & beneath main veins; flowers bright yellow, July to September, racimiform inflorescene, involucre hispid – hirsute, scabrous – hispid exceeding the disc.

Preparation: HPI V6, EHP V3- Q, 1/10, 1000ml take Silphium laciniatum 100 gm, purified water 150 ml, strong alcohol 874 ml; 2X & higher with dispensing alcohol. **Old method** – Class III ,1/6 (AHP).

Prescribed dose: 3rd Potency. Mercury

41. SPILANTHES OLERACEA

Fig. 42 Spilanthes oleracea

Botanical name: *Spilanthes oleracea Linn., Spilanthes acmella Linn., Purethrum spilanthes Med.*

Common name: Paracress, cabbage spilanthes.

Part used: Whole plant.

Habitat: Brazil, eastern & western India, cultivated in Europe.

Identification: Annual herb, 30 cm high, almost leafless; heads on long naked peduncles, slightly in the leaf axils; bell shaped bracts. Plant flowers throughout the year.

Preparation: EHP V3- Q, 1/10, 1000ml take Spilanthes oleracea 100 gm, purified water 330 ml, strong alcohol 690 ml. **Potencies**- 2X contains 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3X & higher with dispensing alcohol.

Prescribed dose: 3x & Higher.

42. WYETHIA HELENIOIDES

Fig. 43 Wyethia helenioides

Botanical name: *Wyethia helenioides Nuttall., Melarhiza inuloides Kellong., Alarconia Helenioides*

Common name: Poison Weed, Gray mule's ears or White head mule ears.

Part used: Root.

Habitat: San Francisco (USA) & valley of the Sacramento.

Identification: Perennial herb, 60 cm high; cauline leaves & bracts much smaller, outer bracts of the involucre mostly subtended by 1 or 2 conspicuous bracts like short petioled leaves; pappus paleae short & unequal.

Preparation:

HPI V6, EHP V4: Q, 1/10, 1000ml take Wyethia helenioides 100 gm coarse powder, purified water 400 ml, strong alcohol 635 ml.

BATTACHARYA HP, HPUS: Q, 1/10, 1000 CC take pulp of the plant 300gms (solids 100 gm, moisture 200 cc), distilled water 200cc, strong alcohol 635 cc.

Old method – F.3. Class III, 1/6- AHP.

Potencies- 2X contains 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3X & higher with dispensing alcohol.

Prescribed dose: 3x & above. **Planets**- Mercury, Sun

43. XANTHIUM SPINOSUM

Fig. 44 Xanthium spinosum

Botanical name: *Xanthium spinosum Linn.*

Common name: Cockle, Spiny clotbur.

Part used: Whole plant.

Habitat: USA, In waste land.

Identification: An annual, branched herb, 30-120cm high; excessively hairy on midrib& veins, axillary tripartite yellow spines in the axil of the petioles; rudimentary ovary, style unbranched; fruit oval, borne singly or in two's in axils, provided all round with slender hooked prickles.

Preparation: HPI& EHP V4: Q, 1/10, 1000ml take Xanthium spinosum in coarse powder, purified water 300 ml, strong alcohol 685 ml. **Potencies-** 2X contains 1 part Q, 2 parts purified water, 7parts strong alcohol; 3X & higher with dispensing alcohol. **Old method**: class III, 1/6, flower for Q – AHP.

INULEAE TRIBE

44. BLUMEA ODORATA

Fig. 45 Blumea odorata

Botanical name: *Blumea odorata DC., Conyza obovata Wall.*

Common name: H- Kuksima, Kukundar. E- Buffalo-ear, Ngai camphor, Ngai camphor shrub, Ngai camphor tree.

Part used: Whole plant excluding seeds, Entire fresh plant just after blooming (Battaharya H P)

Habitat: Throughout India.

Identification: A herb, leaves look like leaves of tobacco, involucral bracts villous, slender & shining, it grows in deserted places & lands. Blumea lacera is useful for manufacturing of camphor.

Preparation: HPI V4& EHP V1/ BATTACHARYA HP: Q, 1/10, 1000ml/Cc take Blumea odorata 642gm containing solid 100 gm & moisture 542 ml, strong alcohol 500ml/Cc. **Potencies**- 2x to contain 1 part Q, purified water 2 parts, strong alcohol 7 parts; 3x & higher with dispensing alcohol.

Prescribed dose: Q, 2x, 3x.

45. INULA

Fig. 46 Inula

Botanical name: *Inula helenium Linn., corvisartia helenium., Enula campana*.

Common name: Elecampane , Scabwort.

Part used: Rhizome and root.

Habitat: Europe & Asia.

Identification: A perennial herb, 2m high; Rhizomatous so it is invasive; daisy like flowers in summer; root aromatic taste later acrid & pungent. Yellow flowers appear in August.

Preparation: HPI , EHP V2: Q, 1/10, 1000ml Take I. helenium in coarse powder 100gm, purified water 150 ml, strong alcohol 874 ml.

HPUS, BATTACHARYA HP- Q, 1/10, 1000Cc, take Inula fresh pulp 250gm (containing 100gm solids, plant moisture 150Cc), strong alcohol 874Cc. Dilutions- 2X & higher with dispensing alcohol. **Old method**- F.3.

EHP V 2: Q, 1/10, 1 litre take Inula in coarse powder 100gm, purified water 440 ml, strong alcohol 690 ml. 2x & higher with dispensing alcohol. Potencies- 2x to

contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Prescribed dose**: 1x -3x.

AHP: Preparation under class III, 1/6, fresh roots dug in autumn, & their second year. **Planets**- Venus

MADIEAE TRIBE

46. ARNICA MONTANA

Fig. 47 Arnica montana

Botanical name: *Arnica montana Linn., Crysanthemum latifolium (DC) Baksay., Doronicum auftriacum quartum Cluf., D. montanum Lam., Caltha alpina., D. germanicum., D. oppositifolium., D. plantaginis folio alternum., Nardus celtica altera., Pancca lapsorum., Ptarmica montana.*

Common name: Celtic nard, Leopard's bane, Mountain arnica, Mountain tobacco.

Part used: Whole plant, generally dried rhizomes & rootlets.

Habitat: Cooler parts of centra Europe, Russia & Siberia, North-Western parts of United States.

Identification: A perennial herb, blackish rhizome- given off numerous filiform roots; purplish points & hairy, dull green, cylindrical involucre, yellow flowers appear in July to Aug.

Preparation: HPI V1, EHP V1 & EHP: Q, 1/10, 1000ml take A. montana in coarse powder 100gm, purified water 400 ml, strong alcohol 635 ml; 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol. 3x & higher with dispensing alcohol. **Old method** – Class III.

EHP V1- Prescribed dose: 3rd – 30th potency, locally Q but should never be applied hot or at all when abrasions or cuts are present, Q to promote growth of hairs and for traumas.

BATTACHARAHP& HPUS: Q, 1/10, 1000Cc take Arnica 400 gm moist magma/ fresh pulp containing solids 100gm & plant moisture 300Cc, distilled water 100Cc, strong alcohol 635Cc; 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Medication-** 3x & higher **- HPUS. BATTACHARYA HP Old method** – F.3. G.H.P. F.4.

AHP: Class III, 1/ 6, full blown flowers to be taken out of the calyx, to remove the larvae of the arnica fly (Tripyta Arnicivora) from the receptacle; 2 parts root, 1 part herb, 1part flowers taken for preparation under class III.

British HP: Note- The root soon loses some of its virtues by exposure to air; it should therefore be always kept in tightly closed barrels or boxes.

Polyglottica- § 4 **Arnicae emplastrum .**

Four parts by weight of finely divided isinglass are dissolved by boiling in a sufficient quantity of water. After straining the solution and slowly evaporating it to 16 parts by weight, is mixed with a warm Infus rad arnica (3 parts by weight of the root to 24 parts of water) and three fourths of this mixture spread on

taffeta, till only one fourth remains. After adding to this 4 parts by weight of the tintura Arnica ad usum externum, it is also spread on the taffeta.

ARNICA MONTANA RADIX-

Fig. 48 Arnica montana root

Prepared from freshly dried root same as arnica mentioned above; **old method** – Battacharya HP & AHP – F.4. Class IV**,**1/10. Used in oil for local application to promote hair growth & fifth dandruff. **Medication** – 3x & higher, trituration 1x & higher. Planets- Mars, Venus

MILLERIEAE TRIBE

Table 2

Drug name	47.GALINSOGA PARVIFLORA	48.SIEGESBECKIA ORIENTALIS	49.PLUMBAGO LITTORALIS
Botanical name	*Galinsoga parviflora H. Wolter*	*Siegesbeckia orientalis Linn.*	*Melampodium paludosum H.B & K., Melanmpodium divaricatum DC.*
Common name	Gallant soldier, Potato weed,Quick weed,Smooth galinsoga.	Indian weed, common St. Paul's wort, Divine herb, Yellow crown-head, Nightshade, Oriental sigesbeckia, Small yellow crown-beard, Yellow weed.	Wild leadwort
Part used	Whole plant	Whole plant	Leaves
Habitat	Throughout the world	Throughout in India in damp localities as a weed ascending to2500m in Himalayas.	Along the shore in the Bay of Rio de Janeiro, Brazil.
Identification	Small flowers with small 5 petals, has yellow spaths 2-3 times bigger than the head of a pin.	Aromatic annual; flower yellow, rays red beneath; fruit enclosed in a boat -shaped bracts, glabrous, slightly rough, black.	Perennial, deciduous herb; branching root & creeping, rounded stem, covered with short stiff hairs, simple trapezoid, form adventitious

			root; small yellowish white flowers, axillary heads arising from involucre with 5 divisions & supported by a somewhat filiform peduncle.
Preparation	**EHP V2** - Q, 1/10, 1lit, take G. parviflora coarse powder100gm, strong alcohol sufficient quantity; 2x & higher with dispensing alcohol.	**HPI V9, EHP V3** - Q, 1/10,1000ml, take S. orientalis in coarse powder 100gm, purified water 600ml, strong alcohol 420ml. Potencies- 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol.	**EHP**-Q, 1/10,1 lit, take P. littoralis 100gm, purified water 330ml, strong alcohol 700ml; 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol.
Prescribed Dose	1x & higher		6x & higher
	 Fig.49 Galinsoga parviflora	 Fig 50Siegesbeckia orientalis	 Fig. 51 pluma bago littoralis

SENECIONEAE TRIBE

50. BRACHIGLOTTIS REPENS (Name signifying a short tongue).

Fig.52 Brachyglottis repens

Botanical name: *Brachyglottis repens Forst., Brachyglottis Forsterl.*

Common name: Puka puka (It is used as paper, hence the native name came).

Part used: Leaf with flower.

Habitat: New zealand.

Identification: Shrub, 7m high with large board, deeply toothed, glossy leave, dawny on under surface; small numerous flower heads, tallow in terminal panicles.

Preparation: HPI V5&EHP V1: Q, 1/10, 1000ml take B. repens in coarse powder 100gm, purified water 400 ml, strong alcohol 635 ml; **Prescribed dose** – 3rd potency.

BATTACHARYA HP & HPUS: Q,1/10, 1000Cc take B. repens moist magma/ pulp 333 gm (containing solids 100gm, moisture 233Cc), distilled water 165 / 167 Cc, strong alcohol 635 Cc. **Old method-** F.3. Dose- 3x & higher.

Potencies: 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Planets-** Venus

51. CINERARIA MARITIMA

Fig. 53 Cineraria maritima

Botanical name: *Senecio Cineraria D.C., Cineraria maritima L.*

Common name: Dusty miller.

Part used: Whole plant.

Habitat: Mediterranean region, also being cultivated in India.

Identification: Perennial shrub, head radiates& disposed in small compact cyme; ray florets yellow but the colour is eclipsed by the plant which appears like a white bloom Apr – Jun.

Preparation: HPI V 5, V10 &EHP V1: Q, 1/10, 1000ml take C. maritima 500gm moist magma (containing solids 100gm & plant moisture 400ml), strong alcohol 635 ml ; 2x to contain 1 part Q, 3 parts purified water , 6 parts strong alcohol ; 3x & higher with dispensing alcohol.

Succus: Extracted juice 87%, strong alcohol 8%, glycerine 5 %, phenyl mercuric nitrate 0.001 %; eye drops necessarily be sterile, isotonic & as per schedule FF of Indian Drug Rules. Planets- Sun, Saturn

52. ERECHTHITES HIERACIFOLIA, Rafinesque.

Fig.54 Erechthites

Botanical name: *Erechthites hieracifolia Linn., Senecio hieracifolius Linn.*

Common name: Fire weed, Fire wood (found in moist woods, common in recent clearings, where the ground has been burned over, hence its popular name).

Part used: Whole fresh plant.

Habitat: North & South America.

Identification: Annual herb, grooved, hairy, erect stem. 7 feet high; the numerous whitish terminal flowers appear from July to Sep, corymb heads, whole plant has rank odour.

Preparation: HPI V & EHP 2: Q, 1/10, 1000ml take E. hieracifolia in coarse powder 100gm, purified water 500ml, strong alcohol 537 ml. **Prescribed dose**: Q, locally for poison oak.

BATTACHARYA HP & HPUS: Q, 1/10, 1000Cc, Erechthites, fresh pulp 600gm (containing solids 100gm & plant moisture 500Cc), strong alcohol 537Cc.
2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol.
Prescribed dose:3x & higher (HPUS).

Old method: F.3.(BATTACHARYA HP), class III (AHP) Planets- Moon

53. PETASITES HYBRIDUS

Fig. 55 Petasites hybridus

Botanical name: *Petasites officinalis Moench., Petasites hybridus (L) Gaertner, Mey. & Scherb., P. ovatus Hill., P. vulgaris Desf., Tussilago hybrida Linn.*

Common name: Butterfly Dock.

Part used: Aerial parts.

Habitat: Europe.

Identification: A perennial herb, rhizomatous, thick tuberous stout, horizontal root; male flowers short stalked, female longer stalked; fruit yellow brown, cylindrical; only sterile flowers secrete nectar.

Preparation: HPI V5: Q, 1/10, 1000ml Take P. hybridus in coarse powder 100gm, purified water 350 ml, strong alcohol 683 ml; 2x to contain 1 part Q, 2 parts purified water, 7 parts strong alcohol ;3X & higher with dispensing alcohol.

54. TUSSILAGO FARFARA

Fig.56 Tussilago farfara

Botanical name: *Tussilago farfara Linn.*

Common name: Celts foot.

Part used: Whole plant

Habitat: Himalayas from Kashmir to Nepal at 1500 to 3500m.

Identification: Perennial herb, grow in damp heavy soil in Europe, Northern Asia; creeping root stock, Yellowish or greyish white in colour; leaves long petioles, roundish cordate, sharp serrate, upper surface is dark green & smooth, under whitish; flowers yellow ligulate many rays, disc florets tubular around twenty.

Preparation: HPI V4 & EHP V 3: Q, 1/10, 1000ml take T. farfara in coarse powder 100gm, purified water 530 ml, strong alcohol 500 ml; 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol ;3X & higher with dispensing alcohol. **Prescribed dose**: Q. **Old method**: class III, 1/6. **Planets-** Mercury

55. TUSSILAGO FRAGRANS

Fig .57 Tussilago fragrans

Botanical name: *Petasites fragrans Presl., Tussilago fragrans Vill.*

Common name: Winter Heliotrope.

Part used: Whole plant

Habitat: Mediterranean region.

Identification: Hardly perennial herb, underground runner; leaves appearing during & after anthesis, scapes covered with many scales, fragment, dioecious flower heads; marginal flowers female, short rays, pale lilac to purple, delighted vanilla like odour, bloom in winter; it differs from common t. farfara in having darker colour in every green foliage.

Preparation: HPI VI & EHP V 3: Q, 1/10, 1000ml take T. fragrans in coarse powder 100gm, purified water 567 ml, strong alcohol 468 ml; 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol;3X & higher with dispensing alcohol. **Prescribed dose**: Q to 6^{th}. **Planets**- Jupiter

56. TUSSILAGO PETASITIS

Fig.58 Tussilago petasites

Botanical name: *Tussilago petasites Vell., Petasites japonicus F. schm., Petasites Vulgaris, Desf., Tussilago petasites Linn.*

Common name: Butter – Bur, Pestilence Wort.

Part used: Whole fresh plant

Habitat: Europe, Great Britain.

Identification: Leaves small scales, numerous; stem with many flowering heads of dull pinkish purple in a narrow, oblong, terminal panicle, dioecious; male plant has looser panicle of smaller heads, female panicle more compact, larger florets all filiform.

Preparation: HPI V & EHP V 3: Q, 1/10, 1000ml take T. petasites in coarse powder 100gm, purified water 567 ml, strong alcohol 470 ml; 2x to contain 1 part Q, 4 parts purified water , 5 parts strong alcohol ; 3X & higher with dispensing alcohol. **Prescribed dose**: Q. Old method: Class III, 1/6;

BATTACHARYA HP & HPUS: Q,1/10, 1000Cc take T. petasites pulp 667 gm (solids 100gm & moisture 567Cc) ; 2x to contain 1 part Q, 4 parts purified

water , 5 parts strong alcohol ; 3X & higher with dispensing alcohol. **Old method:** AHP & GHP – F.3.

Medication: 3x & higher. Planets- Venus

57. SENECIO AUREUS

Fig. 59 Senecio aureus

Botanical name: *Senecio aureus Linn., Var. Senecio Gracilis, Linn.*

Common name: Golden Ragwort, Squaw- Weed, False valerian, Golden senecio, Life root, Uncum.

Part used: Whole plant.

Habitat: United States America.

Identification: Perennial herb, stem, terminating in a kind of umbellate; simple or compound corymb; the lower cauline leaves lyrated shaped, the upper ones few, slender, cut pinnatifid, dentate, sessile; flowers golden yellow; root reddish or purplish externally and white purplish internally with aromatic taste, having scaterd fibres. Flowers May & June.

Preparation: HPI VII, EHP: Q, 1/10, 1000ml take S. aureus in coarse powder 100gm, purified water 500 ml, strong alcohol 537 ml; 2x to contain 1 part Q, 4

parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol.

Prescribed dose: Q – 3rd potency.

BATTACHARYA HP & HPUS: Q, 1/10, 1000ml take S. aureus, pulp 400gm (solids 100gm & moisture 300Cc), distilled water 200Cc, strong alcohol 537Cc; 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol. **Old method**: F.3.; class III, 1/6. **Medication**; 3x & higher. **Planets**- Venus, Moon

58. SENECIO JACOBAEA

Fig. 60 Senecio jacobaea

Botanical name: *Senecio jacobaea Linn.*

Common name: Stinking whillie, St. James-wort, Staggerwort, Tancy ragwort

Part used: Whole plant.

Habitat: Europe, along roadsides, infields, pastures in North America; from New Found land & the Gaspe peninsula, throughout the Maritime provinces; South to Massachusetts & Ontario; Pacific coast.

Identification: Coarse, biennial, winter annual herb; Leaves distributed uniformly to the summit of the stem with lower leaves petioles, upper leaves

sessile; fruit achene with pappus of slender, white bristles, flowering July through October.

Preparation: EHP V 3: Q, 1/10, 1000ml take S. jacobaea in coarse powder 100gm, purified water 470 ml, strong alcohol 560ml; 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol.

Prescribed dose: 1x & higher. **Planets**- Moon, Saturn

CARDUEAE TRIBE

59. CARDUUS BENIDICTUS

Fig. 61 Carduus benedictus

Botanical name: *Cnicus Benedictus L., Carbenia benedicta (L.) Arcang., Carduus Benedictus (Mattioli) (pre Linnean name)., Ceutarea benedicta, Linn., Carduus benedictus Auct., Calcitrapa lanuginosa., Herba cardui benedicti.*

Common name: Blessed thistle, Star thistle, Holy thistle, Carduus plant, Cursed plant, Lovely thistle, Spotted carduus, Spotted thistle, Thistle root, Star thistle.

Part used: Whole plant.

Habitat: Southern Europe, England, USA, South Canada.

Identification: Herbaceous annual plant, Stem spreading, villous, slender; leaves irregular teeth of the wavy margin ending in spines; flowers pale yellow

in green prickly head, each scale of the involucre ending in a long brown bristle; odour unpleasant, taste bitter; fruit numerous prominent ribs, crowned pappus with horny teeth, flowers appear June.

Preparation: HPIVX: Q, 1/10, 1000ml take C. benedictus in coarse powder 100gm, purified water 500 ml, strong alcohol 537ml; 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol.

EHP V1: Q, 1/10, 1000ml take C. Benedictus moderately coarse powder 100gm, strong alcohol 700ml; 2x & higher with dispensing alcohol; **Prescribed dose:** 1x & higher.

BATTACHARYA HP: Q, 1/10, 1000Cc take C. benedictus pulp 400gm (Solids 100g, moisture 300Cc), distilled water 200Cc, strong alcohol 537Cc; **Old method** – F.3.

AHP: Class III, 1/6.

Polyglottica- Fresh herb, §3 Planets: Sun

60. CARDUUS MARIANUS

Fig .62 Carduus marianus

Botanical name: *Silybum marianum Gaertn., Carduus marianus Linn., Onicus marianus.*

Common name: Blessed thistle, Milk thistle, Our lady thistle, St. Mary's thistle, Chardon marie,

Part used: Seeds or whole plant at flowering time.

Habitat: Punjab, Northwest Himalayas, Jammu & Kashmir, Southern Europe and Great Britain.

Identification: Biennial, erect, thistle like herb; leathery involucral bracts with a spine 1 or 2cm long or the outer mucronate, rose purple, all bisexual, slender corolla, shining white pappus, outer seed coat thin, swelled on boiling. Flowers appear in June& July.

Preparation: HPI VI, VX& EHP V 1: Q, 1/10, 1000ml take C. marianus in moderately coarse powder 100gm, purified water 250 ml, strong alcohol 780ml.

Prescribed dose: Q & lower potencies.

BATTACHARYA HP: Q, 1/10, 1000Cc take C. marianus pulp 333gm (100gm solids & moisture 233Cc), distilled water 267Cc, strong alcohol 537Cc. Potencies- 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol.

Old method (BATTACHARYA HP & AHP): 1 part by weight of the ripe whole seed with 2 parts by weight of dilute alcohol. Drug strength ½. Dilution- 1x to contain 30 drops of Q & 70 drops of dilute alcohol. 1to contain 3 drops of Q & 97 drops of dilute alcohol. 2x, 3x & 4x or 2 potencies with dilute alcohol & next higher potencies with dispensing alcohol.

Polyglottica- Take one part by weight of the ripe, unground seeds with one part of distilled water and one part of strong alcohol, and macerate 8 days for

tincture. The 1st decimal potency is prepared with 30 drops of the tincture to 70 drops of diluted alcohol; the 2nd and 3rd also with diluted alcohol; the following with strong alcohol. The 1st centesimal potency with 3 drops of the tincture to 97 drops of diluted alcohol, the 2nd with diluted alcohol, the following with strong.

Planets- Jupiter, Saturn.

61. CENTAUREA TAGANA

Fig. 63 Centaurea tagana

Botanical name: *Centaurea Africana Lam., Centaurea tagana Brot.*

Common name: African knapweed

Part used: Root.

Habitat: Dry woods & scrub, central & southern Portugal, South western Spain, Sicily, Northen Africa.

Identification: Bracts ovoid, globose, dark striate, middle with narrow scarious margin near apex, broadly ovate inner with wide scarious margin near apex; pappus longer than achene, brown.

Preparation: EHP V1- Q, 1/10, 1 lit take C. tagana in coarse powder 100gm, purified water 320ml, strong alcohol 700ml; 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol.

Prescribed dose: 3x & higher.

Polyglottica- §3 **Planets**- Sun

62. CIRSIUM ARVENSE

Fig. 64 Cirsium arvense

Botanical name: *Cirsium arvense (Linn)Scop., Ciricus arvensis Hoffin.*

Common name: Canada thistle, Reeping thistle.

Part used: Whole plant.

Habitat: From Sunderban to Panjab, Western Himalayas & Western Tibet, North America.

Identification: A small herb having extensive creeping root; purple flowers appear in July & Aug.

Preparation: EHP V1 & BATTACHARYA HP- Q, 1/10, 1 lit /1000Cc take C. arvense moist magma 400gm (containing solids100gm & moisture 300ml/Cc), strong alcohol 735ml/Cc; 2x & higher with dispensing alcohol. **Prescribed dose:** 1x & higher.

63. CYNARA SCOLYMUS

Fig. 65 Cynara scolymus

Botanical name: *Cynara scolymus Linn.*

Common name: Globe Artichoke, Artichoke.

Part used: Whole plant

Habitat: Cultivated throughout India.

Identification: Thistle like perennial herb; tuberous root; purple flowers, thick ovoid broad involucral bracts (4-5 rows), flat triangular spiny above; flowers all tubular, hermaphrodite, not ligulate with 5 parted liliac corolla, appear Aug- Sep.

Preparation: HPIV9& EHP V 1- Q, 1/10, 1000ml take C. scolymus 310gm containing solids 100gm& moisture 210ml, strong alcohol 725ml. **Potencies**- 2x to contain 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3x & higher with dispensing alcohol. **Prescribed dose**: 1x & higher.

64. LAPPA ARCTIUM

Fig. 66 Arctium lappa

Botanical name: *Arctium majus Bernh.; Arctium lappa Linn*.

Common name: Bat weed.

Part used: Root.

Habitat: Europe, Northen Asia, United States.

Identification: Coarse biennial weed; leaves green above & whitish, cottony beneath; flowers, purple in smooth heads, the imbricated scales in the involucre forming a hooked bur.

Preparation: EHP V 2- Q, 1/10, 1 lit take L. Arctium in coarse powder 100gm, purified water 400ml, strong alcohol 635ml; 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol.

Prescribed dose: Q- 3rd potency.

65. LAPPA MAJOR

Fig. 67 Lappa major

Botanical name: *Arctium majus Bernh., Arctium lappa., A. bardana., Lappa minor., L. officinalis, L. tomentosa.*

Common name: Bat weed, Burdock, Hare burr, Beggar's button.

Part used: Root (sweetish, mucilaginous & seed (HPUS).

Habitat: Europe, Northen Asia, United States.

Identification: Coarse biennial weed, 1st year only rosette of leaves present; solid petiole, deeply furrowed; 2nd year stem arises; flower purple, tubular, appear in July to October.

Preparation: HPI VX&EHP V 2- Q, 1/10, 1 lit take L. major in coarse powder 100gm, purified water 435ml, strong alcohol 635ml/ 600ml. **Prescribed dose**: 1x & higher.

HPUS, BATTACHARYA HP- Q, 1/10, 1000Cc take L. major moist magma 300gm containing solids 100gm & moisture 200Cc, distilled water 200Cc, strong alcohol 635Cc. **Potencies**- 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Prescribed dose**: 3x & higher. **Old method**- F.3.

Polyglottica- § 1 **Planets**- Moon, Venus

66. ONOPORDUM

Fig. 68 Onopordum

Botanical name: *Onopordum acanthium Linn.*

Common name: Scotch thistle, Cotton thistle, Woolly thistle.

Part used: Flowers.

Habitat: Europe, Eastern Asia, sparingly naturalized over much of the United States along roadsides& in waste places.

Identification: Coarse, strong spiny biennial herb, winged stem; discoid with all flowers tubular and perfect, flowers pale purple; pappus reddish brown bristles, one seeded achene; flowers July through Sep.

Preparation: EHP V 3- Q, 1/10, 1 lit, take Onopordum100gm, purified water 650ml, strong alcohol 370ml. Potencies- 2x to contain 1 part Q, 5 parts purified water, 4 parts strong alcohol; 3x & higher with dispensing alcohol.

67. SAUSSUREA LAPPA

Fig. 69 Saussurea lappa

Botanical name: *Saussurea lappa, C.B.Clarke*.

Common name: Pushkara, Kushta, Kurch, Costus speciosus, Kena, Pachak, Costus.

Part used: The dried root.

Habitat: It grows plentifully in the Himalayas at higher altitudes and the moist slopes of the mountains found in the valley of Kashmir.

Identification: Elegant tall perennial herb; heart shaped leaves; stag horn stem& branches; roots are perennial, stems are annual, roots dug up in the

autumn, contain 10% essential oil with strong fragrant odour, alkaloids, resins, tannins.

Preparation: EHP V 3 & BATTACHARYA H P - Q, 1/10, 1 lit/1000Cc , take S. lappa dried & coarse powder 100gm, purified water 200 ml/Cc, strong alcohol 850 ml/Cc . **Potencies-** 2x to contain 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3x & higher with dispensing alcohol/ 2x and higher with dispensing alcohol. **Prescribed dose:** 1x & higher.

CICHORIOIDEAE TRIBE

68. CICHORIUM INTYBUS

Fig. 70 Cichorium intybus

Botanical name: *Cichorium intybus Linn., C. sylvestre, Intybum erraticum.*

Common name: Chicory, Wild succory, Cichorie.

Part used: Fresh root, Flower (EHP)

Habitat: Europe, USA along the Atlantic coast, India found in fields, cultivated in Bihar, Punjab, Himachal Pradesh, Assam, Maharashtra, Gujara, Tamil Nadu, Orissa, Andra Pradesh & Kerala.

Identification: Perennial herb, branching roots have milky juice, hairy stem; axillary terminal flowerheads- July to Sep in morning, cloudy day, withering with sunshine.

Preparation: HPIV9/ BATTACHARYA/ HPUS – Q, 1/10, 1000ml/ 1000Cc take C. intybus moist magma/ fresh pulp 300gm containing solids 100gm & moisture 200ml/Cc, purified water 200ml/Cc, strong alcohol 637ml/ Cc.

EHPV1: Q, 1/10, 1 lit, C. intybus, Flos 100gm, plant moisture/ purified water 650ml, strong alcohol 370ml.

Potencies- HPI: 2x to contain 1 part Q, 4 parts purified water, 5 parts strong alcohol

BATTACHARYA & HPUS: 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol.

EHP V 1: 2x to contain 1 part Q, 5 parts purified water, 4 parts strong alcohol 3x & higher with dispensing alcohol. **Prescribed dose**: 1x & higher, 3x & higher. Planets- Moon

69. LACTUCA SATIVA

Fig. 71 Lactuca sativa

Botanical name: Lactuca sativa Linn., L. crispa., L. sylvestris.

Common name: Garden lettuce.

Part used: Fresh plant

Habitat: Throughout the world cultivated on both hot &temperate climates.

Identification: Annual, cultivated as a salad vegetable, 2 feet high, lower sub orbicular, upper cordate toothed leaves with yellowish green colour; yellowish corollas; milky narcotic juice, more during inflorescence, March- Nov.

Preparation: EHP V2- Q, 1/10, 1 lit, take L. sativa 100gm, purified water 500ml, strong alcohol 537ml. **Potencies**- 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Prescribed dose**: 1x & higher.

AHP: Prepared under class I, ½.

70. LACTUCA VIROSA

Fig . 72 Lactuca virosa

Botanical name*: Lactuca virosa Linn., L.foetida., L. sylvestris Garsault., Intybus augustus., Lactuca sinuate Forsk.*

Common name: Wild lettuce, Poison lettuce, Prickly lettuce, Lactuca, Acrid lettuce, Strong- scented lettuce.

Part used: Whole Fresh plant

Habitat: Central & Southern Europe (found in hedges, old walls, edges of fields).

Identification: Brown root, deciduous biennial herb; prickly leaves, undivided, depressed; plant exudes a bitter, milky juice of a narcotic odour; small pale yellow flowers- Aug.

Preparation: EHP V2- Q, 1/10, 1 lit, take L. virosa moist magma containing solids 100gm, moisture/purified water 500ml, strong alcohol 537ml. **Potencies**- 2x to contain 1 part Q, 3 parts purified water, 6 parts strong alcohol; 3x & higher with dispensing alcohol. **Prescribed dose**: 1x & higher.

AHP: Prepared under class I, ½.

HPIV 7: Q, 1/10, 1000ml, take Lactuca in coarse powder 100g, purified water 500ml, strong alcohol 537mlPotencies- 2x contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x with dispensing alcohol.

BATTACHARYA HP: Q, 1/10, 1000Cc take Lactuca. Virosa fresh pulp 400gm containing solids 100gm& moisture 300Cc, distilled water 200Cc, strong alcohol 537Cc; 2x contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x with dispensing alcohol. **Old method:** F.4. **Planets**- Moon

LACTUCARIUM. English, Lettuce opium; **Description**. A white, rather thick, milky juice, obtained by incision from several species of lactuca, forming scales, or lumps. on exposure to the air. It is met with in irregular and shrunken pieces of a reddish-brown colour externally, internally opaque, waxy, and when recent, creamy, becoming dark on exposure.

Preparation of Lactucarium.-Just before the time of flower ing, the stem is cut off about a foot below the top, after which a trans verse slice is taken off daily until September. The juice is pure white at first but readily becomes brown on the surface, is collected from the wounded top by the finger and is transferred to earthen cups, from which it is turned out after hardening.. It has a strong opium-like odor, and a very bitter taste. Preparation for Homeopathic Use.-The dried milk-juice is triturated, as directed under Class VII- **HPUS**

71. NABALUS SERPENTARIA

Fig . 73 Nabulus serpentaria

Botanical name: *Prenanthes serpentaria Pursh., Nabalus albus, var. serpentaria.*

Common name: Rattle snake root, white lettuce, Cancer weed, Lion's foot.

Part used: Whole fresh plant.

Habitat: Eastern North America to Alabama, Massachussets to Florida, Mississippi, Rich soil on the borders of wood, sterile soil in open ground

Identification: Perennial herb, spindle shape tuberous root; greenish white, yellow, purplish flowers, summer or autumn; root is extremely bitter.

Preparation: HPI V7 / BATTACHARYA/HPUS – Q, 1/10, 1000ml/1000Cc, take N. serpentaria, moist magma 400gm containing solids 100gm, strong alcohol 730ml/Cc. Potencies- 2x contain 1 part Q, 2 parts purified water, 7 parts strong alcohol; 3x & higher with dispensing alcohol. **Old method** – F.3. **Medication** – 3x & higher. **Planets**- Moon

72. TARAXACUM

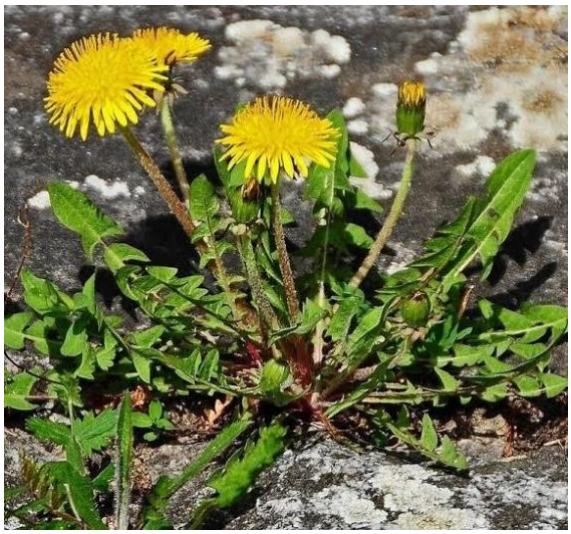


Fig. 74 Taraxacum

Botanical name: *Taraxacum officinale Weber., Leontodon Taraxacum., Taraxacum Dens leonis., Lactuca pratense., Leontodontis., Leontodon officinalis., L. vulgare.*

Common name: Balloon plant, Dandelion, Monkshood, Puff ball.

Part used: Whole plant (gathered before perfection of the flower) .

Habitat: Throughout Europe & India in Himalaya.

Identification: Perennial herb, cylindrical root, flowers Apr to Nov, milky juice of a saltish bitter taste; all ligulate flowers; achene with long beak; flowers longer

than leaves, expand only in the morning & in fine weather; a troublesome weed difficult to eradicate from fields& pastures, everywhere in the North.

Preparation: HPI V X, EHP V3, BATTACHARYA, HPUS Q, 1/10, 1000ml/ 1000Cc, take Taraxacum moist magma 400Cc containing solids 100gm& moisture 300m Al/Cc, purified water 200ml/Cc, strong alcohol 537ml/Cc. **Potencies-** 2x contain 1 part Q, 4 parts purified water, 5 parts strong alcohol; 3x & higher with dispensing alcohol. **Old method**: F.1. (BATTACHARYA HP), F.3.(AHP, GHP), class I, ½ (AHP).

Prescribed dose: Q – 3rd potency, in cancer 1-2 drams fluid extract; 3x & higher.

Planets- Jupiter, Venus

VERNONIEAE TRIBE

73. VERNONIA ANTHELMINTICA

Fig. 75 Vernonia anthelmintica

Botanical name: *Centratherum anthelminticums Kuntz., Vernonia anthelminatica Willd.*

Common name: Purple Fleabane.

Part used: Seed.

Habitat: Throughout India.

Identification: Annual, 1m high; pappus reddish, the exterior rows very short, sub-paleaceous, persistent, the inner hairs somewhat flattened, deciduous, much shorter than the glabrous corollas; seeds bitter.

Preparation: HPI VI, EHP V4 - Q, 1/10, 1000ml, take V. anthelmintica in coarse powder 100gm, strong alcohol in sufficient quantity. **Potencies-** 2x & higher with dispensing alcohol. **Prescribed dose**: Q.

Drugs present in Polyglottica

1. **Achilea Eupatorium –** Achillea folipendulina- § 1, fresh herb when coming into flower.
2. **Gnaphalium Arenarium-** §3, fresh plant, flower
3. **Hieracium pillosella-** Fresh plant, §1
4. **Hieracium umbellatum-** Fresh plant, §1
5. **Lactucarium anglicum-** Lactuca virosa- dried juice for trituration, §7
6. **Lactucarium gallicum-** Lactuca sativa- dried juice for trituration,§7
7. **Senecio gracillis-** Fresh blooming plant, §3
8. **Antennaria** -The fresh , blooming plant , for essence , according- § 3 .

Preparation: All Compositae family medicinal plants using homoeopathically is preparing under class 1, 3 ,4 (HPI, EHP); F1, F3, F4 (AHP, BATTACHARYA HP, HPUS, GHP), § SYMBOL IN POLYGLOTTICA

Class 1, F.I, §1- Tinctures prepared with equal parts by weight of juice and alcohol. The freshly-gathered plant or part thereof, chopped and pounded to a pulp is enclosed in a piece of new linen and subjected to pressure. The expressed juice is then, by brisk agitation, mingled with an equal part by weight of alcohol. This mixture is allowed to stand for eight days in a well-stoppered bottle, in a dark cool place and is then filtered. Amount of drug power of tincture, ½.

Class III, F.3, §3 - Tinctures prepared with two parts by weight of alcohol to one part of plant or part thereof. The fresh plant or part thereof, is pounded to a fine pulp and weighed. The two parts by weight of alcohol are taken and after thoroughly mixing the pulp with one-sixth part of it, the rest of the alcohol is added. After having stirred the whole and having filled it into a well stoppered bottle, it is allowed to stand eight days, in a dark, cool place. The tincture is then separated by decanting, straining and filtering. Amount of drug power of tincture, 1/6.

Class IV, F.4, §4- Tincture prepared with five parts by weight of alcohol. Weigh the finely divided substance (dried vegetable and animal substances are pulverized, fresh animal substances are pounded) and pour over it five parts by weight of alcohol, then let the mixture remain eight days (provided that for the particular medicine a longer maceration is not required), at ordinary temperature in a dark place, shaking it, twice a day; then pour off, strain and filter.

Class 7, §7 - For the trituration and potentisation of dry medicinal substances. [5]

Drug Standardisation

Success in homoeopathic prescribing is based upon the purity and quality of raw drugs & finished products. A sub-standard drug will not produce desired results in a sick individual. By standardisation we can study the qualitative and quantitative characteristics of drugs. They are

The **pharmacognostical studies** of raw drug plant material include study of the gross morphology of the raw drug, its macro and microscopical characteristics and after suitable processing enumeration of characteristic structures of cells, tissues and organs under the microscope and determining their essential bio statistical dimensions.

The **physico-chemical** parameters of the raw drug and prepared mother tincture include moisture content, ash value, extractive value, presence of active constituents in raw drug and organoleptic characteristics, carrying out specific tests and TLC, UV spectrophotometry of the mother tincture. These can be used as a bench mark standard against any commercial sample to be compared with in future or as reference whenever there is a necessity.

The **pharmacological spectrum** of a drug is ascertained through experimental trials on laboratory animals under standard laboratory conditions which include preliminary estimation of dosage, evaluation of efficacy and safety and also the mode of action of homoeopathic drugs.

At present, **pharmacognostical & physico-chemical studies are being undertaken at two centres of the council:**

1. Dr D. P. Rastogi Central Research Institute (H), Noida
2. Drug Standardisation Unit (H), Hyderabad (A.P.) 80

STANDARDISATION OF DRUGS GIVEN IN HPI

Table 3

S.NO	NAME OF MOTHER TINCTURE	Alcohol content%	Ph	Wt per ml	Total solids	Lamda max	Q COLOUR
1	**Abrotanum**	72.0 to 76.0 percent v/v	5.2 to 6.0	0.850 g to 0.920 g.	Not less than 1.130 percent w/v	290 and 320 nm	**Greenish brown**
2	**Absinthinum**	63.0 to 67.0 percent v/v	Between 5.20 to 6.20	From 0.880 to 920 g	Not less than 0.75 percent w/v	272 nm	**Greenish brown**
3	**ARNICA MONTANA**	50.0 to 61.0 percent v/v.	5.60 to 5.80	0.900 g to 0.925 g.	Not less than 0.85 percent w/v	284 and 378 nm	
4	**ARTEMISIA VULGARIS**	61.0 to 64.0 percent v/v	5.80 to 6.30.	0.864 g to 0.907 g.	Not less than 0.3 percent w/v.	236, 270 and 332 nm,	
5	**BELLIS PERENIS**	61.0 to 65.0 percent v/v.	5.0 to 6.5.	0.80 g to 0.930 g.	Not less than 0.80 percent w/v.	240 and 315 nm.	**Brownish yellow**

6	**CALENDULA OFFICINALIS**	38.0 to 42.0 percent v/v	5.1 to 6.1	0.9933 g to 0.970 g	Not less than 1.8 percent w/v	256 and 290 nm	
7	**CARDUUS BENEDICTUS**	47.0 to 51.0 percent v/v	Between 5.50 to 6.50	From 0.920 to 0.950 g	Not less than 1.25 percent w/v	270 and 318 nm	**Greenish brown**
8	**CARDUUS MARINUS**	71.0 to 74.0 percent v/v.	5.50 to 6.50.	0.930 g to 0.944 g	Not less than 0.70 percent w/v.	260 nm	**Light brown**
9	**CHAMOMILLA**	47.0 to 51.0 percent v/v.	5.5 to 6.5.	0.910 g to 0.940 g	Not less than 0.80 percent w/v.	320, 268 nm	**Greenish brown**
10	**CINA**	87.0 to 91.0 percent v/v	5.30 to 6.30	0.825 g to 0.840 g	Not less than 0.60 percent w/v	334 nm.	**Brownish yellow**
11	**ECHINACEA ANGUSTIFOLIA**	75.0 to 79.0 percent v/v.	5.5 to 6.2	0.830 g to 0.870 g	Not less than 1.00 percent w/v	278 and 324 nm	
12	**ERIGERON CANADENSIS**	47.0 to 51.0 percent v/v	Between 5.50 to 6.50.	From 0.910 to 0.940 g.	Not less than 1.25 percent w/v	285 and 320 nm	

13	**EUPATORIUM PERFOLIATUM**	47.0 to 51.0 percent v/v.		0.910 g to 0.940 g	Not less than 0.70 percent w/v.	267, 315 nm.	**Brownish yellow**
14	**GRINDELLIA ROBUSTA**	80.0 to 84.0 percent v/v	Between 5.30 to 6.30	From 0.840 to 0.870 g	Not less than 1.25 percent w/v	265, 285 and 330 nm	**Red yellow**
15	**TARAXACUM**	48.0 to 52.0 percent v/v	Between 5.50 to 6.50	From 0.910 to 0.940 g	Not less than 0.75 percent w/v	288, 324 nm	**Green brown**

HPI GIVEN STANDARDISATION OF 28 COMPOSITAE DRUGS (TLC & CHEMICAL TESTS)

SILYBIN: C25H22O10: Mol. wt.: 482.43

Description: Monohydrate crystals. Melting point: 167 decomposes at 180°. Soluble in acetone, ethyl acetate, methanol and in ethanol, sparingly soluble in chloroform, practically insoluble in water.

Identification: Take about 10 mg in test tube, dissolve in 2 ml ethanol and add a few drops of ferric chloride solution; reddish violet colour develops.

Ultraviolet absorbance: (Methanol) 288 nm (log E 4.33).

THUJONE: C10H16O Mol. Wt.: 152.23

Description: colourless or almost colourless liquid. Soluble in Alcohol, methyl alcohol and in chloroform, practically insoluble in water.

Identification: Take 2 to 3 drops in 2 ml chloroform, add a few drops of antimony trichloride reagent and 1ml sulphuric acid through the side of the test tube; pink colour develops.

Ultraviolet absorbance :(Hexane): 300 nm, (E.23).

EUPATORIN: C18H16O7

Identification: Crystalline sold. Melting range 196° to 198°. Slightly soluble in water; soluble in alcohol and in chloroform.

Description: Dissolve about 10 mg in 2 ml methanol, add a few pieces of magnesium powder and a few drops of hydrochloric acid; pink colour is produced.

Ultraviolet absorbance: (Ethanol) : 243, 254, 342 nm (E 17.400; 19.300; 19.800; 27.7007).

SANTONIN: C15H18O3: Mol. wt.: 246.30

Description: White tubular, orthorhombic, spherical crystals, which become yellow on exposure to sun light. Almost tasteless with bitterness after sometime.

Melting range: 171° to 174°. Very slightly soluble in water; sparingly soluble in dispensing alcohol and in ether; freely soluble in chloroform.

Identification: To about 10 mg, add 1 ml of 10 per cent alcohol potassium hydroxide solution; violet red colour develops.

Ultraviolet absorbance: In alcohol: Water (1:1) maxima at 245 µ. (E1% 1 cm = 450).[6]

The amount of alkaloids purely depend upon the origin of plant, time of collection, method of analysis.

- **Asteroideae-** Largest sub family contain flavonoids, monoterpenes as secondary metabolites.
- Secondary metabolites absent in calendula. It contain fatty oil (dimorphecolic acid, caledic acid, diterpenes(pimaranes).
- Close affinity between eupatoriaea & heliantheae is due to presence of 8β-substituted germacranolides.
- In senecionae pyrrolidine alkaloids (macrocyclic senecionine type) derived from ornithine. Sesquiterpene lactones known as eremophilanes, furanoerenophilanes are oplopanone derivatives. Polyacetalynes absent. Coumarines absent.
- Inulae contain oligosaccharide inuline , a sesquiterpene -8,12 eudesmanolides present and is a sister group to helianthieae.
- Cichoricae contain glycosides of simple sesquiterpene lactones , lactucin type; flavonoids, phenolic acids, caffic acid, simple coumarines, triterpenes, taraxasterol(milk latex).

Standardisation of drugs list done by CCRH is mentioned in Annexures

PHYTOCHEMISTRY- ASTERACEAE FAMILY

INTRODUCTION

- Chemicals made by plants fill our lives.
- Paracelsus The early 16th century renaissance physician and father of toxicology.
- Pollen grains from genera achillea, centaurea & senecio used in either Neanderthal burial rituals or their medicinal practices was identified during archaeological site in 1960, in shanidar cave. These genera important in official pharmacopoeias and traditional medicines through out Europe and The Middle East.
- Echinacea and Chamomile are important medicinal plants in North America and Europe.
- Chinese annual artemisia and South American stevia are effective anti malarials and commercial sweeteners to alleviate global obesity respectively.
- A hint of Asteraceae chemical diversity is found in the rainbow of colours and spectrum of scents the family produces vivid scarlet dahlias; subtle blue cornflowers; cumin – scented lavender cotton; thymol- scented artemisia; urine-scented chrome-yellow common ragwort; and spicy-scented orange marigolds.
- Persistent belief of conservation lobbies, that if we find the right plant-based medicines we can protect ourselves from, and cure ourselves of, disease and prolong our lives- but perhaps at the risk of overexploiting the resource.

- In 1970 Tanzanian chimpanzee populations used leaves of aspilia , yellow flowered daisy for scouring worms from gutwalls.
- Official European Pharmacopioeas included Herba Cardi benedicti, Folia farfarae and Flores Calendulae using pharmacologically as Centaurea benedicta as panacea, Tussilago farfara from leaves of this plant an expectorant, Calendula used to induce sweating and as a stimulant.
- Rubber from taproots of Russian dandelions and the stems of the Mexican guayule shrub used as substitute to malacian rubber tree during 2nd world war, now as hypoallergic rubbers for gloves and condoms.
- In 1971 the Chinese chemist Tu Youyou purified an extract from annual artemisia that was effective against the malaria parasite and isolated artemisinin by studying texts on ancient Chinese medicine. In 2015 she was co-recipient of the Nobel Prize in Physiology or Medicine for her work on artemisinin and malaria.
- Modern drugs from Asteraceae family approved by the United States Federal Drugs Administration, include the sweetener stevioside isolated from stevia; silymarin from blessed milk thistle to protect liver cells; taste inhibitor cynarin isolated from artichoke, anti-parasitic chemicals artemisinin, artemether and artesunate derived from genus artemisia and tarragon produces the anti-glaucoma agents latanoprost and bimatoprost.
- Molteno disease(South Africa) , Winton's disease(New Zealand) and Pictou disease (Canada) , the symptoms of pyrrolizidine poisoning had been known since the late 19th century.

Plants from this family have been cultivated for their nutritional value, medicinal uses, and ornamental purposes. Members of this family have exhibited numerous pharmacological activities, including **anti-viral, anti-diabetic, anti-tumour, anti-nociceptive, anti-inflammatory, hepatoprotective, anti-parasitic, anti-malarial, and wound-healing properties,** among others. These medicinal properties are attributed to the presence of **bioactive compounds like monoterpenes, diterpenes, triterpenes, sesquiterpenes and sesquiterpene lactones, polyacetylenes, flavonoids, phenolic acids, benzofurans, coumarins and pyrrolizidine alkaloids.**

the leaves and stems very often contain secretory canals with resin or latex (particularly common among the subfamily Cichorioideae). They can be extracted from different parts of the plant using **classical and advanced techniques. Hydro distillation (HD) and steam distillation (SD)** are among the most important traditional approaches to extracting EOs. These advanced techniques are secure, fast, environmentally friendly, and efficient and can also be conveniently automated.

The main biosynthetic pathways are derived from acetyl coenzyme A and/or amino acids leading to a remarkable number of unique structures isolated from nearly every tribe and genus investigated.

One of the first major syntheses on the chemistry of Asteraceae was published in the 1977 volumes entitled The Bilogy and Chemistry of the Comositae. Next major work on the chemistry of Asteraceae was published by **Zdero and Bohlmann** (1990) in an article summarizing important milestones in our understanding of the chemical diversity found in the family. They outlined over

7000 constituents identified from over 5000 species studied before 1990 and provided a broad assessment of the available chemical data.

The contributions of Bohlmann and co-workers to the field of Asteraceae chemistry continues today with an excellent online resource known as "**The Bohlmann Files",** which provides a searchable database for secondary metabolites found in Asteraceae (Berendsohn et al.1998). Using the chemical database **SISTEMAT**, researchers at the University of São Paulo continued their studies of Asteraceae, applying a broad range of statistical methods to establish phenetic relationships among members of the family.

FLAVONOIDS: Flavonoids are major components in this family. Bohm and Stuessy (2001) provide an excellent review on flavonoids in Asteraceae. They found different types of flavonoids like anthocyanins, chalcones, aurones, flavonones, flavones and flavonols. Flavonoids attract pollinators (yellow flower colour predominates in Asteraceae) and seed and fruit dispersers; provide protection against UV light and function in numerous plant-plant and plant-microbe signaling interactions. Flavonoids are polyphenolic phytochemicals produced in fruits, nuts and vegetables and dietary consumption of these structurally diverse compounds is associated with multiple health benefits including increased lifespan, decreased cardiovascular problems and low rates of metabolic diseases. Flavonoid are effective in both chemoprevention and chemotherapy is associated with their targeting of multiple genes/pathways including nuclear receptors, the aryl hydrocarbon receptor (AhR), kinases, receptor tyrosine kinases and G protein-coupled receptors. Flavones and flavonols to be the most commonly occurring flavonoid structural types for Asteraceae and Anthemideae.

Essential oils (EO) are complex mixtures of low molecular weight compounds synthesized by plants possessing antimicrobial properties.

The metabolites present in essential oils include mainly terpenes, terpenoids, phenylpropanoids, aldehydes, esters, alcohols and ketones, whose bioactivity varies depending on the structural configuration of the molecule.

The main mechanism of action of essential oils against microorganisms involves the interaction of their hydrophobic components with the lipids of the cell membrane. This interaction causes loss of membrane integrity and this damage induces changes in the functioning of the electron transport chain, in the absorption of nutrients, in both protein and nucleic acid synthesis, in the coagulation of cellular content and in the inhibition of enzymes essential for energy metabolism, causing cell death.

Terpenoids are the largest class of secondary metabolites found in plants, including monoterpenes (C10), sesquiterpenes (C15), diterpenes (C20) and triterpenes (C30) and are the second most common metabolites in Asteraceae. Many of these compounds serve as volatile signals in plant-insect and plant-plant interactions and play essential roles in plant reproduction and defence. Sesquiterpenes (including lactones) and monoterpenes, diterpenes (Alvarenga et al. (2005) has given importance of diterpenes in composite family) are equally abundant in Asteraceae.

Saponins, which are the glycosidic forms of triterpenes, play important roles in the structure and function of cell membranes in addition to their role as defensive compounds against insects and pathogens.

Sesquiterpene lactones (STLs) are a large group of plant secondary metabolites with a high diversity in structure and biological activity. They are a

terpenoid subgroup characterized by a 15-carbon backbone structure containing at least one lactone group with a carbonyl moiety. The 15C backbone can be rearranged in several ways, is mostly cyclic, and is further decorated with different functional groups, which results in a large variety of sesquiterpenoids. The main subtypes are germacranolides, guaianolides, and eudesmanolides. About 5,000 known STL structures are found in the Asteraceae family.

In plants, the highest amounts of STLs have been found in specialized cells, such as capitate glandular trichomes, resin ducts, or laticifers which corroborated their suggested role as anti-herbivory agents.

Although the highest amounts of STLs have been found in specialized cells, lower amounts were also found in inner plant tissues, including the root, e.g., in sunflower (Helianthus annuus), false ragweed (Parthenium hysterophorus), and chicory (Cichorium intybus L.)

The most well-known is **artemisinin,** an STL isolated from Artemisia annua, which has been used since the early 1980s for treating malaria caused by the parasite Plasmodium falciparum. Remarkably, no severe side effects have been reported for this drug or its more water-soluble derivatives, such as artemeter, artesunate, or artemisone . Artemisinin is a cadinanolide with a 1,2,4-trioxane ring system, and its mode of action is based on the selective uptake of the compounds by infected blood cells, consequently causing accumulation of damaged, ubiquitinated proteins in the parasite.

Apart from its antimalarial activity, artemisinin was found to possess anti-cancer activity, a topic of intense current research.

The biosynthesis of STLs involves the mevalonic acid pathway and various modifications like oxidation, halogenation, acetylation, glycosylation, and glucosylation, leading to a wide array of structures. Understanding and predicting STL biosynthesis pathways are crucial for exploiting their therapeutic potential, necessitating advanced techniques like sequence-based and expression-based pathway predictions and co-expression analysis.

A group of complex **coumarins** known as furanocoumarins are common in the family and display a variety of biological activities against insects and pathogens. Like polyacetylenes, furanocoumarins also possess potent phototoxic properties capable of killing or inhibiting growth of pathogens, insects and nematodes (Seigler 1998). coumarins are seen in Anthemideae, Astereae and Mutisieae.

Benzofurans occur sporadically throughout Asteraceae and they are present in Eupatorieae, Heliantheae and Senecioneae .

According to our chemical database, **polyacetylenes** reach their maximum abundance in Anthemideae with nearly 4000 chemical occurrences, followed by Heliantheae , Astereae, Eupatorieae, cardueae, senecioneae and Inuleae . Polyacetylenes serve as important defense compounds in Asteraceae, exhibiting insecticidal and anti-feedant activities (Seigler 1998). Some polyacetylenes are considered phytoalexins; their concentration rapidly increases in response to attack by pathogenic fungi (Seigler 1998). In addition, polyacetylenes found in Asteraceae display potent phototoxic effects, killing or inactivating viruses, bacteria, fungi, nematodes and also negatively affecting herbivorous insects.

pyrrolizidine alkaloids were thought to accumulate only in Eupatorieae and Senecioneae. pyrrolizidine alkaloids in Asteraceae based on differential tissue expression of homospermidine synthase (HSS), the main enzyme involved in the biosynthesis of pyrrolizidine alkaloids; Senecioneae, Eupatorieae, and Cardueae has true alkaloids.

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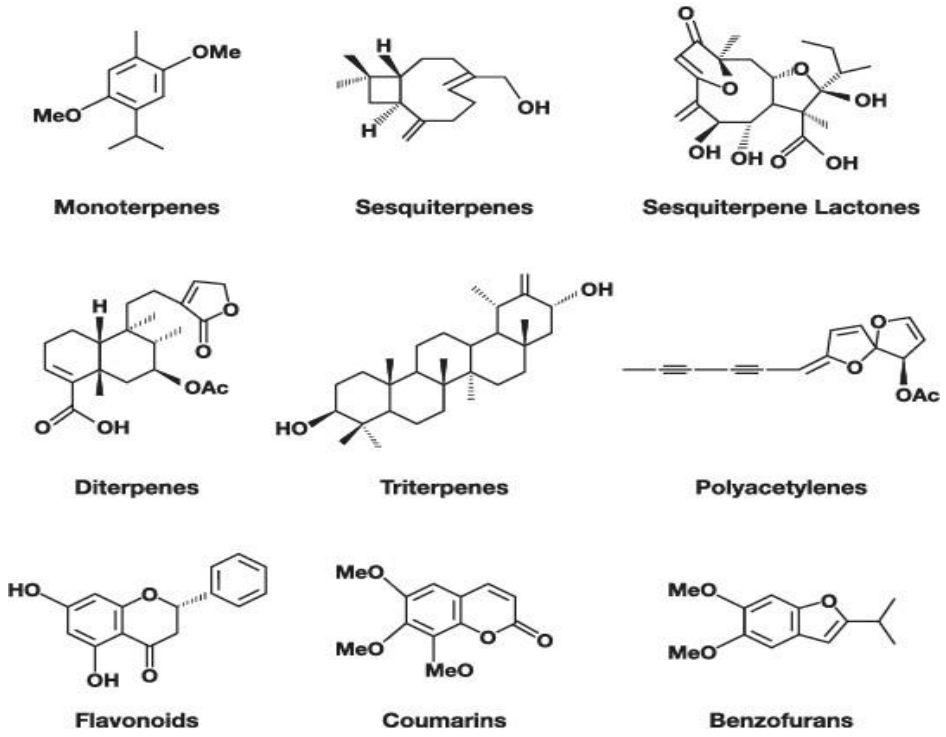

Fig 76 Structure of Phytoconsituents

- **Presence of Active principles and their pharmacological action and clinical utility in homoeopathy given in Annexures.**

Anthemideae tribe:

Artemisia contra & Judaica given separately given see cina in brackets mentioned in Clarke Clinical Dictionary of Materia Medica, Allen's Encyclopaedia of Materia Medica V1.

Anthemis cotula (may weed) which acts as diaphoretic in small doses, emetic, sudorific in large doses mentioned in TREATISE ON THE MATERIA MEDICA INTENDED AS A SEQUEL TO THE PHARMACOPOEIA OF THE UNITED STATES.

Journals showing in vitro and in vivo studies on pharmacological action in this tribe are:

- Artemisia Abrotanum- Reduction of number of eggs of dwarf tapeworm, rodent pinworms in the faeces of mice after administration of ethanolic extract from A. abrotanum leaves shows anti parasitic activity.[7]

  Inhibition of growth of pseudomonas, Escherichia coli etc by the essential oil, including borneol, cymene, camphor, terpineol, 1,8- cineole, and aromadendrene shows anti -bacterial and anti- fungal activity. [7]
- Lethal effect of A. absinthium ethanolic extract on Ascaris scum eggs and Trichostrongylus larvae, lethal effect on Haemonchus contortus tested in vivo; reduction in its mobility in vitro shows Anthelimintic activity.[8]
- Methanolic extract from A. absinthium because of its anti- oxidant activity reduces brain damage, inhibits of lipid peroxidation, and restores the activity of enzymes involved in reducing oxidative stress by flavonoids and phenolic acids in this plant shows Neuro protective activity.[8]

- Inhibition of mouse brain monoamine oxidase (MAO) enzyme shows MAO inhibition activity by flavonoids, anti- implantation activity and estrogenic activity on female Wister rats by flavonoids in A. vulgaris. [9]
- In vitro studies of chamomilla, Anthemis nobilis showing sedative, anxiolytic, antispasmodic activity. [10]
- The essential oil of Chrysanthemum leucanthemum has anti -microbial activity against salmonella typhi investigated by agar dilution method.[11]
- Ethyl acetate leaf extract in vitro alpha glucosidase assay shows anti diabetic activity of Santolina chaemcyparissus.[12]
- Anti -oxidant activity of essential oil was due to alpha-pinene and caryophyllene oxide in Tanacetum vulgare. [13]
- Millifolium- flavonoids and sesquiterpenoids have antiproliferative effects against mouse P-388 leukaemia cells and cervix epithelial adenocarcinoma (HeLa), breast epithelial adenocarcinoma (MCF-7) and skin epidermoid carcinoma (A431) cells33.[14]
- Root ethanolic extract (200 mg/kg) was orally administered to mice and it showed anticonvulsive properties by curative effects in maximal electroshock seizures in Anthemis pyrethrum.[15]
- The petroleum ether extract of A. Judaica exhibited pronounced activity against bacteria than fungi.[16]

High Speed Counter current Chromatography (HSCCC) Separation Procedure- for santonin separation.[17]

ASTEREAE TRIBE:

Erigeron philadelphieum (Philadelphia fleabane) - Palliative in calculous affections

Journals- In vitro, In vivo studies on pharmacological action:

- Methanolic B. perennis root extract shows bellis saponin BS2 for cytotoxic activity against HL-60 human promyelocytic leukaemia cells shows Anti carcinogenic effect.[18]
- morphoanatomical features of erigeron canadensis along with powder microscopic and organoleptic characters and physicochemical data are diagnostic to establish the standards for ensuring quality and purity of the drug.[19]
- high therapeutic potential of G. squarrosa extract during symptomatic treatment of cold-related diseases.[20]
- Quantitative estimation of phenolics in two grindelia species.[21]
- Characterization of phenolics occurring in the infusions and methanol extracts of “baylahuen” by HPLC-DAD-ESI-MS. A methanol extract obtained from the young shoots and leaves had stronger antioxidant effects (measured in vitro with a DPPH-based assay) than an extract prepared with hot water.[22]

CALENDULEAE TRIBE

- By LACE (laser activated calendula officinalis extract) in vitro studies shows anti- tumour activity and immunomodulatory activity; in vivo studies on nude mice shows anti- tumour activity.[23]

EUPATORIEAE TRIBE

E. cannabinum mentioned in pharmacopoeia homoeopathica polyglottica available in Europe, Asia, part used flower.

Eupatorium teucrifolium (wild horehound) has diaphorietic, cathartic properties, used in southern states for fever, ague.

Using to treat renal complaints, bony problems, relapsing fevers, diarrhoea etc.

- Pharmacological activity of Eupatorium cannabinum L. hydroalcoholic extract have been studied with the use of two in vitro assays - DPPH reduction spectrophotometric assay, and evaluation of cytotoxic effect on Jurkat cells by MTS assay.[24]
- E. ayapana, the petroleum ether extract inhibited growth of bacteria B. subtilis, Staphylococcus epidermidis, S. aureus, M. luteus, E. coli, P. aeruginosa, Salmonella typhi, Shigella sp., Vibrio cholerae and Vibrio parahaemolyticus.[25]
- Antimicrobial activity of E. perfoliatum, E. purpureum, E. aromaticum by agar diffusion method and disk diffusion method.[25]
- EPMG extract demonstrated anxiolytic effects, which may be mediated by GABAergic system, and was able to increase GABA levels and reduce of glutamate and aspartate concentrations in mice hippocampus, which can directly and/or indirectly assist in their anxiolytic effect.[26]
- The anti-inflammatory activity of the extract was determined, in vivo, by adopting the carrageenan-induced oedema in the hind paws of albino rats.[27]

GNAPHALIEAE TRIBE

- G. leuteoalbum – Jercy cudweed, red tip rabbit tobacco; distributed Africa, Asia, South America; part used leaves. Cytotoxic effect of crude methanol of the leaves of this plant done against healthy mouse fibroblasts (NIH3T3), healthy monkey kidney(vitro)and four human cancer cell lines (gastric, AGS: colon, HT-29; and breast, MCF-7 and MDAMB-231) using MTT assay.[28]

- G.uliginosam ethanolic extracts of plant reveals different plant phytoconstituents and their pharmacological action.[29]
- Gnaphalium genus has different species having medicinal properties by having secondary metabolites – review article.[30]

HELIANTHEAE TRIBE

JOURNALS

- The conducted GC-FID, and GC-MS analyses resulted in the detection of 45 compounds in essential oil of ambrosia artemisiafolia.[31]
- an in vitro human renal proximal tubule cell model to perform several assays that collectively evaluated the nephrotoxicity potential of C. zacatechichi.[32]
- The phytochemical action of Echinacea angustifolia was assessed using spectrophotometric methods. The result of the study shows there is presence of alkaloids, flavonoids, phenols, glycosides, saponins, steroids and terpenoids. But there is absence of tannis in the sample.[32]
- Alkamides of Echinacea purpurea have been reported to have cannabinomimetic properties on both cannabinoid CB1 and CB2 receptors, which may be attributed to their structural similarity to the endogenous cannabinoid receptor ligand anandamide.[39] Anandamide's effects are mediated in the brain and periphery by CB1 and CB2 receptors. The activation of the former with endogenous ligands plays a considerable role in controlling anxiety and the latter is mainly involved in immune system activities.[33]
- Leaf suspension of Eclipta alba (2 & 4g/kg) orally in alloxan induced diabetic rats resulted in reduction in blood glucose level, glycosylated

haemoglobin. There was decreased activity of glucose-6 phosphatase and fructose1,6-bisphosphatase, and an increase in the activity of liver hexokinase. Thus oral administration of Eclipta alba suspension possess potent anti-hypergylcemic activity.[34]

- From an n-Butanol-soluble fraction of a methanol extract of a flower petals of sunflower, two new oleanane-type triterpene glycosides, helianthosides, along with four known triterpene glycosides, helianthosides and B (6) isolated which possess distinct anti-inflammatory activities on 12-O tetradecanoylphorbol-13-acetate induced ear edema in mice. All of the triterpene glycosides exhibit potent inhibitory effects and are more potently inhibit.[35]
- Ethanol extract of leaves from microwave heating and from 60 C showedthe strongest radical scavenging activity, followed by flower and tuber, whereas stem extracts demonstrated the lowest inhibition capacity.[36]
- parthenin, the major sesquiterpene lactone from P. hystertophorus known to be a contact allergen to humans is also a potent toxin responsible for the manifestation of Partheniosis (Narasimhan et al., 1980) in livestock fed on the weed.[37]

Table 4

Mechanism of Action	Extract / Component	Study Type	Outcomes
Modulation of adhesion molecule Expression	Parthenolide	in vitro/human RA synovial tissue	↓Intercellular adhesion molecule-1 (ICAM-1)
Inhibition of proinflammatory enzyme activity	Parthenolide	in vivo In vitro/human epidermal keratinocytes	↓5-lipoxygenase (IC50:11.8 ± 4.8 µg), phosphodiesterase-3 (IC50: 35.2 ± 12.3 µg/mL), and phosphodiesterase-4 (IC50: 20.8 ± 9.4 µg/mL)
Modulation of proinflammatory mediators	Parthenolide	in vivo in vitro/human epidermal keratinocytes	↓PGE2 production (IC50: 37.9 ± 4.16 µg/mL) and TNFa production (IC50: 31 ± 0.04 µg/mL)
	Parthenolide	in vitro/RAW264.7 cells	↓IL-12 production
	Aqueous extract	in silico	↓ PGE2 and IL-1β, ↑ IL-10
	Parthenolide	in vitro/human RA synovial tissue	↓TNF-α, and IFN-gamma
	Feverfew's extracts	in vitro/human monocytic THP-1 cells	↓ LPS-mediated TNF-α and CCL2 (MCP-1)
Inhibition of NF- Kb	Parthenolide	in vitro/peripher	Inhibition of NF- kB

		al blood T cells	
Antioxidant Activity	Parthenolide	in vivo	↑Total antioxidant capacity, glutathione (GSH) content, superoxide dismutase (SOD), and catalase (CAT) ↑The survival rate in mice pretreated with parthenolide compared to the control group when exposed to electron beam irradiation
	Methanol extract	in vitro	↑Confirmed by evaluation by 1,1-diphenyl-2-picryl-hydrazyl (DPPH) assay

- Methanol extraction from flowers and individual components of Rudbeckia hirta L. exhibit immunomodulatory (in phytohemagglutinin-induced leucocyte blast transformation on mouse splenocytes), antioxidant (on the model of Oxygen Radical Absorbance capacity) and anti-inflammatory (inhibit 5-lipoxygenase) properties.[38]
- The content of polyphenol compounds and phenolic acids in ethanol extracts of all investigated plants of silphium spp was the highest in the leaves and the maximal value had plants S. laciniatum.[39]
- Spilanthol (AcO) was a fungal inhibitor against the planktonic and biofilm subtypes of a multidrug-resistant C. albicans variant, impacting the functioning of the yeast cell wall and membrane of cells and inhibiting the growth of fungus.[40]
- Clinical observations indicate that the homoeopathic preparations of Wyethia in low concentrations, even beyond Avogadro's number, might

show anti-inflammatory properties that the hormesis concept against HMC-1 can explain.[41]

- The main responsible constituents of the inhibition of the proliferation of human tumour cells in vitro were the xanthanolides 8-epixanthatin and 8-epi-xanthatin epoxide .[42]

INULEAE TRIBE

- By exploring the healing effect of essential oil on a rat deep second-degree burn model, Fan et al. (2015) found that essential oil treatment significantly reduced the water content of burned rat tissues, shortened the crusting time, accelerated healing, and significantly increased the expression of growth factors in tissues.[43]
- The anti-inflammatory assay was carried out through the induced rat hind paw edema as a model of acute inflammation, using the fresh egg albumin as phlogistic agent. Inula [44]

MADIEAE TRIBE

- Widrig et al. in 2007 prepared a topical A. montana gel containing helenalin, 11_,13-dihydrohelenalin and its ester that shows significant anti osteoarthritic activity by blocking the transcription factor NF-kB and NF-AT.[45]

MILLEREAE TRIBE

- Asteraceae plants were investigated as the source of anti-ageing and antioxidant agents; Experimental, Yeast Schizo saccharomyces pombe cells; The results indicated that among other fractions of Asteraceae plants, G. parviflora have potential antioxidant and antiaging activities;

Potential use in cosmetology and management of inflammatory diseases. 2021.[46]

- the antiarthritic effects of SO extract (SOE) on collagen type II (C II)-induced rheumatoid arthritis (CIA).[47]

SENECIONEAE TRIBE

- an ethanolic extract of C. maritima possibly prevents cataractogenesis in a rat model by minimizing free radical generation.[48]
- the effects of lipophilic extracts from rhizomes of P. hybridus, petasin and iso-petasin on the formation and release of prostaglandin E2 (PGE2) and also the activity and expression of cyclooxygenases (COX-1 and COX-2) in rat primary microglial cells.[49]
- modern in vitro or in vivo pharmacological studies such as anti-inflammatory activities, neuro-protective activity, anti-diabetic, anti-oxidant activity- Tussilago farfara.[50]
- The antimicrobial effect of the aqueous solutions obtained from the soft extract of Cnicus benedictus flowers was investigated.[51]
- Survey the influence of silymarin and its polyphenolic fraction on rats fed with a high cholesterol diet showed that silymarin reduced cholesterol levels in the liver and plasma of rats- c.marianus[52]
- Arvense A , ($C_{29}H_{50}O_2$) ; Arvense B (($C_{14}H_{18}O_3$), Antimicrobial Khan et al. (2014) [53]
- Boulos et al., cynaropicrin demonstrates potent inhibition of hematopoietic tumor cells both in vitro and in vivo by inhibiting c-Myc, STAT3, AKT, and ERK1/2, and by suppressing the tubulin network.[54]

- in vitro and in vivo studies with arctigenin against various cancer shows anti cancerous activity.[55]
- Sesquiterpene lactones also demonstrate antitumor activity . Thus, onopordopicrin has cytotoxic activity against the KB cell line (HeLa derivative). Onopordopicrin has an antiproliferative effect with an IC50 of 15 Monthe HL60 (promyelocytic leukemia).[56]
- S. lappa extract apparently protects against acute damage to rat gastric mucosa induced by hydrochloric acid–ethanol and reserpoid. The three active ingredients (saussureamines A, B, and C) isolated from S. lappa have remarkably protects against the gastric damage caused by hydrochloric acid and ethanol. Saussureamine A also inhibits stress-induced gastric ulcers in mice. Aside from saussureamines A, B, and C, costunolide and dehydrocostus lactone remarkably improves gastric ulcers in rats.[57]
- Dry extract of chicory herb is hygroscopic amorphous yellow-brown powder. The content of phenolics sum in terms of chicoric acid is 8.3 ± 0.4%. According to HPLC-MS, the following oxycoumarins are identified in the phenolic complex of the extract: esculetin (4) and chicoryin (1), hydroxycinnamic acids: chicory (10), chlorogenic (3), kaftaric (2), isochlorogenic A (9), coffee (5); flavonoids: isocvercetin (7), astragaline (8) and rutin (6). The dominant substances are esculletin, chicoryin, and chicoryic acid[58]
- Physico-chemical parameters of raw drug viz., extractive values, ash values, formulation, besides weight per ml., total solids, alcohol content

along with thin layer chromatography (TLC) and ultraviolet spectroscopic (UV) studies have been undertaken for mother tincture for the first time.[59]

- Dandelion have demonstrated a series of antidiabetic effects, which are due to the pharmacological actions of compon ents such as sesquiterpene lactones, triterpenes/phytosterols (taraxasterol), phenols, flavonoids, and phenolic acids[60]

VERNONIEAE TRIBE

- Hydroalcoholic extract of fruits of *Vernonia anthelmintica* Willd. (HAEVA) was assessed for its anti-inflammatory activity and anti-arthritic activity by in vitro methods[61]

The amount of alkaloids purely depend upon the origin of plant, time of collection, method of analysis.

- **Asteroideae-** Largest sub family contain flavonoids, monoterpenes as secondary metabolites.
- Secondary metabolites absent in calendula. It contain fatty oil (dimorphecolic acid, caledic acid, diterpenes(pimaranes).
- Close affinity between eupatoriaea & heliantheae is due to presence of 8β-substituted germacranolides.
- In senecionae pyrrolidine alkaloids (macrocyclic senecionine type) derived from ornithine. Sesquiterpene lactones known as eremophilanes, furanoerenophilanes are oplopanone derivatives. Polyacetalynes absent. Coumarines absent.
- Inulaea contain oligosaccharide inuline , a sesquiterpene -8,12 eudesmanolides present and is a sister group to helianthieae.

- Cichoricae contain glycosides of simple sesquiterpene lactones , lactucin type; flavonoids, phenolic acids, caffic acid, simple coumarines, triterpenes, taraxasterol (milk latex).

Materials and Methods

MATERIALS AND METHODS

This study is a purely descriptive study based on a comprehensive literature review.

Data Sources:

- Primary Sources: Homoeopathic Pharmacopoeias (HPI, HPUS, EHP, British HP, Battacharya H P, Homoeopathica polyglottica, AHP), Homoeopathic Materia Medica (Clarke's Materia Medica, Robin Murphy, Boericke, Allen's EMM, HGS, MMP,) etc .
- Secondary Sources: Scientific databases (PubMed, Google Scholar, ScienceDirect), online resources (WebMD, MedicineNet), research articles, and textbooks on botany, pharmacology, and Homoeopathy.

Inclusion Criteria:

- Study of Composite family medicinal plants which are used in Homoeopathy.

Exclusion Criteria:

- It is completely a theoretical and field study. No patients are included in this study.
- Other than composite family drugs excluded

Data Collection and Analysis:

- Data was collected through a systematic review of relevant literature.

- Information on botanical characteristics, medicinal properties, clinical applications, and Homoeopathic preparations was extracted from the identified sources.
- Data analysis involved identifying common themes, comparing and contrasting information from different sources, and summarizing key findings.

Observations & Results

OBSERVATIONS AND RESULTS

TOTAL NO OF DRUGS IN THREE SUB FAMILIES :

Table 5 Number of drugs in Three sub families

SLNO.	SUB FAMILIES	NO OF DRUGS	PERCENTAGE
1.	Asteroideae	58	80%
2.	Carduoideae	09	12%
3.	Cichorioideae	06	08%
	TOTAL	73	100%

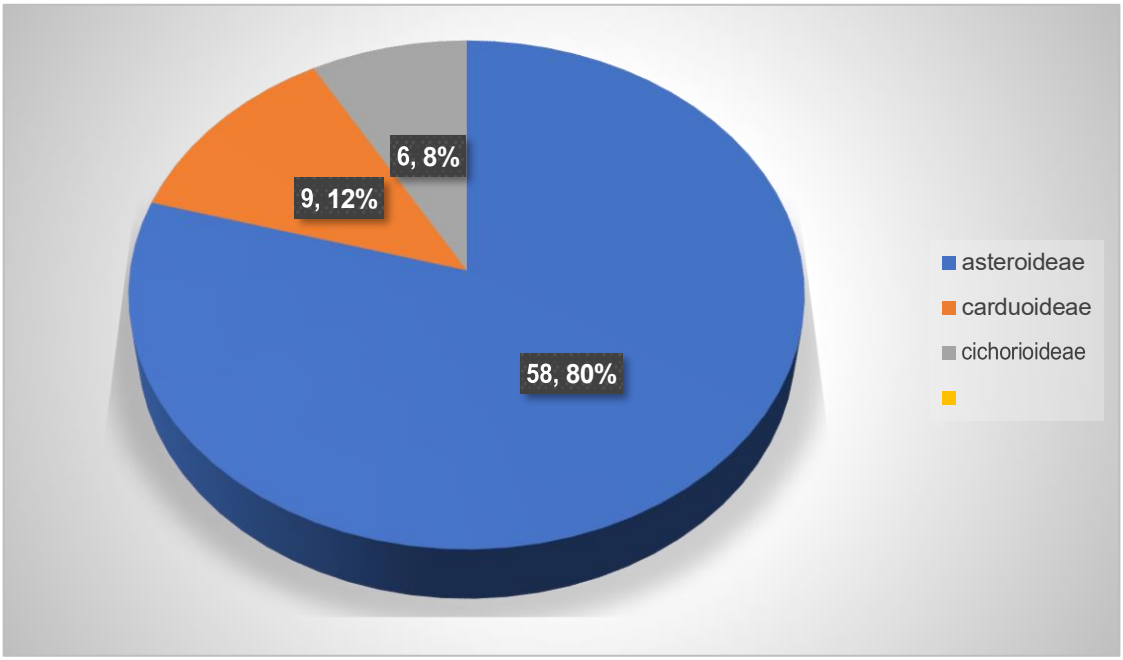

Figure 77 : Showing total number of drugs in 3 sub families

73 drugs are available in different homoeopathic pharmacopoeias . From above table observation shows that out of 73 drugs 80% homoeopathic medicines are from Asteroideae subfamily, 12% from Carduoideae subfamily and remaining 8% from Cichirioideae subfamily.

Table 6 : Preparation of Compositae family drugs

NO	PLANT NAME	OLD METHOD CLASS	FORM COARSE/ MOIST MAGMA	POTENCIES Q: PURIFIED WATER: STRONG ALCOHOL	PROVED BY
1	ABROTANUM	III, §3, F.3	C.P	2X with Dilute alcohol, 3x and higher with dispensing alcohol	Gatchell
2	ABSINTHIUM	§3, F.3, III	C.P	1:2:7	Gatchell
3	ANTHEMIS NOBILIS	III,F.3	C.P	1:2:7	Berridge
4	ANTHEMIS PYRETHRUM	§3	M.M	2X & higher with Dispensing alcohol	HPUSA
5	ARTEMISIA VULGARIS	III, F.3	M.M/ C.P	1:2:7	Noack and Trinks
6	CHAMOMILLA	I, F.1,	M.M	1:4:5	Hahneman n
7	CINA	IV, F.4	Moderatly C.P	2x & higher with Dispensing alcohol	Hahneman n
8	CHRYSANTHEMUM LEUCANTHEMUM		Not mentioned	1:4;5	

9	MILLIFOLIUM	I, F.I, §1	M.M	1:3:6	Nenning, Hartlaub and Trinks
10	SANTOLINA CAHMAECYP ARISSUS		C.P	1:2:7	CCRH
11	TANACETUM VULGARE	III, F.3	C.P/ M.M	1:2:7	Hering
12	BELLIS PERENNIS	F.1, I	C.P/ M.M	1:2:7	Dr. Henry Thomas,
13	ERIGERON CANADENSIS	III, F.3	M.M	1:4:5	Dr. W. H. Burt
14	GRINDELIA ROBUSTA	F.3, F.4, §4	C.P/ M.M	2x and higher, with dispensing alcohol.	Dr. Seward
15	GRINDELIA SQARROSA	F.3.	M.M/ C.P	2x and higher, with dispensing alcohol/ 1:3:6	Dr. Bundy
16	HAPLOPAPPU S		C.P	2x and higher, with dispensing alcohol.	GHP
17	SALIDAGO	F.3 , III, §3	C.P	1:3:6	Rademach er & Gucken
18	CALENDULA	I, F.I	M.M	1:4:5	Dr.Franz

19	EUPATORIUM AROMATICUM	F.3	C.P/ M.M	1:4:5	Dr.Hale
20	EUPATORIUM AYAPANA		M.M	1:3:6	
21	EUPATORIUM CANNABINUM	§3	C.P	1;3;6	Berridge
22	EUPATORIUM PERFOLIATUM	III,	C.P	1:4:5	Dr. Williamson
23	EUPATORIUM PURPUREUM	F.3	C.P/M.M	1:4:5	Dr. Hale,
24	GUACO	F.3, F.4 ,(GHP), III	M.M	1:2:7	Dr. Petroz, Spain.
25	LIATRIS SPICATA		C.P	1:3:6	T.C.Duncan, A.E.White
26	GNAPHALIUM LEONTOPODIUM		C.P	1:5:4	Mentioned in hpusa
27	GNAPHALIUM POLYCEPHALUM	F.3, III	C.P/ M.M	1:4:5	Dr. Willium Banks,
28	GNAPHALIUM ULIGINOSUM		C.P/ M.M	1:4:5	Dr. Woodbury,
29	AMBROSIA ARTEMISIAFOLIA		M.M	1:3:6, 1:4:5(HPUS)	Dr. C.F. Millspaugh , Dr. E.T.Marsh
30	CALEA ZACATECHICHI		C.P	1:3:6	HPUSA

31	ECHINACEA ANGUSTIFOLIA	III, F.3	C.P/ M.M	1:2:7	Dr.J.C.Fahnestock, T.C.Duncan
32	ECHINACEA PURPUREA		C.P	1:3:6	Seen in robin murphy
33	ECLIPTA ALBA		C.P	1:2:7	
34	HELIANTHUS ANNUS	F.4, ClassIV	M.M	1:4:5	Drs. Peschier and Cessole
35	HELIANTHUS TUBEROSUS			1:4:5	
36	PARTHENIUM		M.M	2X & higher with Dispensing alcohol	H.Rornias, Dr.B.H.B. Sleight
37	PYRETHRUM PARTHENIUM			1:4:5	Cooper
38	RUDBECKIA HIRTA	III	M.M	1:3:6	
39	SILPHIUM LACINIATUM	III	C.P	2X& higher with dispensing alcohol	Hale
40	SPILANTHUS OLERACEA	§4	C.P	1:3:6	HPUSA
41	WYETHIA HELENIOIDES	III, F.3	C.P/ M.M	1:3:6	Dr. Selfridge.
42	XANTHIUM SPINOSUM	III	C.P	1:2:7	Seen in Boericke

43	BLUMIA ODORATA		M.M	1:2:7	
44	INULA HELENIUM	F.3, III	C.P/ M.M	2X&hidher with dispensing alcohol/ 1	Dr. Fischer
45	ARNICA	F.3, F.4 ,Class3; Root ClassIV, F.4	C.P	1:3:6	
46	GALINSOGA PARVIFLORA		C.P	2X & higher with Dispensing alcohol	H.Wolter
47	SIEGESBECKI A ORIENTALIS		C.P	1:3:6	
48	PLUMBAGO LITTORALIS			1:3:6	
49	BRACHYGLO TTIS REPENS	III, F.3	C.P/ M.M	1:3:6	Dr. Ficher
50	CINERARIA MARITIMA		M.M	1:3:6	
51	ERECHTHITE S	F.3, III	C.P/ M.M	2X & higher with dispensing alcohol/ 1:4:5	Hale
52	PETASITES HYBRIDUS	§3	C.P	1:2:7	GHP
53	TUSSILAGO FARFARA	§3	C.P	1:4:5	Cooper

54	TUSSILAGO FRAGRANS		C.P	1:4:5	Demeures
55	TUSSILAGO PETASITES	F.3(AHP&GHP)	C.P/ M.M	1:4:5	Dr. Küchenmeister, Dr. Rosenberg,
56	SENECIO AUREUS	F.3, III	C.P/ M.M	1:4:5	Small. Dr. A. E
57	SENECIO JACOBEA		C.P	1:3:6	Cooper
58	CARDUS BENEDICTUS	III	M.M	1:3:6	Noack,Trinks
59	CARDUS MARIANUS		M.C.P	1:4:5	Dr. Reil,
60	CENTAUREA TAGANA		C.P	1:3:6	Dr. Chagon, Duc de Sorentino, e
61	CIRSIUM ARVENSE		M.M	2X& higher with dispensing alcohol	
62	CYNARA SCOLYMUS		M.M	1:2:7	G. Luis
63	LAPPA ARTICUM	F.3, III		1:3:6	Dr. Jeans& S.A.Jones
64	LAPPA MAJOR			1:3:6	HPUSA
65	ONOPORDUM			1;5;4	HPUSA
66	SAUSSUREA LAPPA		C.P	1:2:7/ 2X&higher	

				with dispensing alcohol	
67	CICHORIUM INTYBUS		M.M	1:4;5	Dr. W. Cattell,
68	LACTUCA SATIVA	I	C.P	1:4;5/ 1:3;6	Seen in Clarke
69	LACTUCA VIROSA	I		1:4:5/ 1;3;6	Dr. Seidel , reference to proving Hyg., v.
70	NABULUS SERPENTARIA	III, F.3	M.M	1:2;7	Dr. M. E. Lazarus
71	TARAXACUM	F.1, I, §1	M.M	1:4;5	Hahnemann
72	VERNONIA ANTHELMINTICA		C.P	2X& higher with dispensing alcohol	Mentioned in Boericke

Above table shows medicines under old method not mentioned any class are 29 drugs. While preparing potencies the ratio of Q, P.W, S. A is 1:2:7; 1:4:5; 1:3:6; 2x & higher with dispensing alcohol the number showing 15, 21,24, 14 respectively.

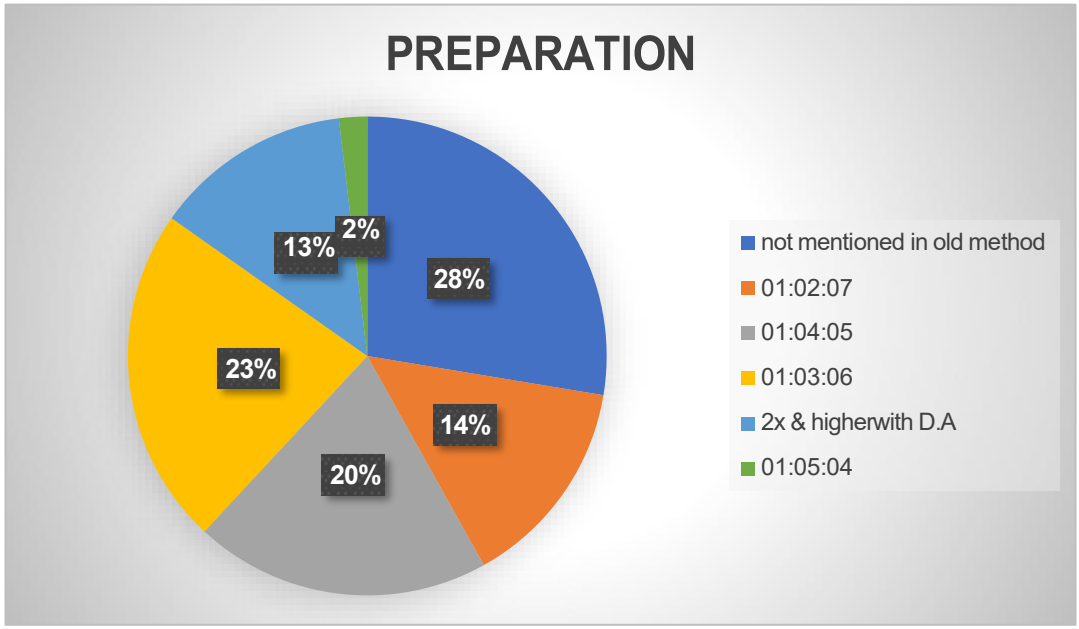

Figure 78. Showing preparation of compositae family drugs

Table : 7 Frequency of using compositae family drugs

S.NO	FREQUENCY OF USING	NAME OF DRUGS - Number
1	Most frequently used drugs	Chamomilla, Calendula, Eupetorium perfoliatum, Gnaphalium polycephalum, Arnica, Carduus marianus, Millifolium, Santonin, Echinacea angustifolia, Bellis per- 10
2	Frequently used drugs	Wythia, Taraxacum, Cina, Erigeron, Grindelia robusta- 5

3	Rarely used drugs	Abrotanum, Absinthium, Artemisia vulgaris, Tanacetum, Solidago, Eupatorium purpureum, Liatris spicata, Ambrosia artemisifolia, Eclipta alba, Parthenium, Pyrethrum parthenium, Blumia odorata, Plumbago littoralis, Brachyglottis repens, Tussilago farfara, Senecio aureus, Cirsium arvense, Sassurea lappa, Anthemis nobilis, Anthemis pyrethrum- 20
4	Known not used	Inula, Carduus beneductus, Lappa major, Tussilago petasites- 4

drugs not known are – 33

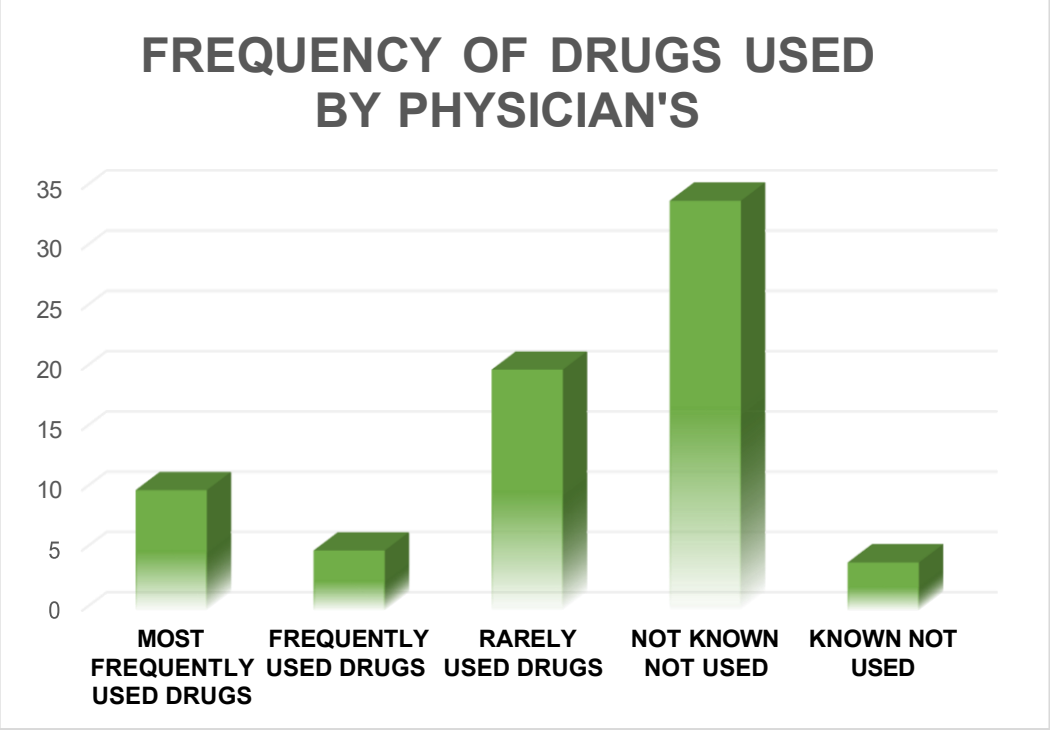

Figure 79 showing frequency of using compositae family drugs

Discussion

DISCUSSION

Homoeopathic Pharmacy as per HPI – Homoeopathic Pharmacy is concerned with collection, identification, preparation, standardization and preservation of the drugs used in homoeopathic practice.

Hahnemann in Organon of Medicine 6th edition has given guidelines regarding Homoeopathic pharmacy in § 264 to 272. In §264 & 265 Hahnemann explained the true physician must be provided with genuine medicines of unimpaired strength and must give the patient the correct medicine prepared by himself.

As per Hahnemann explained in these aphorisms this study gives information regarding Asteraceae family accordingly. Among the sources of homoeopathic preparations plant kingdom occupies around 80%. From plant kingdom most of the homoeopathic medicines are prepared from Compositae (Asteraceae) family.

Compositae family is the second largest family available all over the world except Antarctica. Around 200 medicinal plants are available in this family among them we are preparing 74 homoeopathic preparations.

Among 74 homoeopathic remedies 80% remedies are from Asteroideae sub family which is the largest of all in composite family. Carduoideae has 12%, Cichirioideae has 8.20% homoeopathic remedies.

Preparation under old method all pharmacopoeias flowed class3, class1, class 4, class 7; around 48 drugs of monographs contain the class number under old method remaining 28 drugs not mentioned about old method of preparation in their respective monograph. New method of Preparation of mother tinctures by percolation/ maceration they have taken coarse powder/

moist magma; for preparing potencies the ratio of Q: purified water: strong alcohol mentioned in pharmacopoeias are 1:2:7; 1:4:5; 1:3: 6 and 3x & higher with dispensing alcohol. Only British homoeopathic pharmacopoeia mentioned Proof spirit / Rectified spirit for preparing mother tincture & it covers collection time, dispensing form of medicines under monographs but it has mentioned less number of Compositae drugs. Dose - from mother tincture to higher potencies.

Homoeopathic content of individual drugs present in Materia medicas like Boericke, Lotus Materia medica, Clarke, Kent

Homoeopathic Materia medica of 131 New Homoeopathic therapeutics by O.A. Julian

- Calea zacatechichi
- Cynera scolymus
- Galinsoga parviflora
- Onopordum acanthium - but mind symptoms of these drugs present in the book, **Perfect Materia medica of Mind by Seghal's.**

Haplopappus bayaheulen, **G**naphalium Leontopodium, **E**clipta alba, **E**upatorium cannabinum, **E**upatorium ayapana, **R**udbeckia hirta**, H**elianthus tuberosus, **S**pilanthus oleracea, **S**antolina cheamesyparesis, **C**irsium arvense, **S**aussurea lappa - the books **Vegetable materia medica and materia medica of Western India** has mentioned some of these medicines but complete homoeopathic drug picture is not available in literature.

Asteroideae has **flavonoids** abundantly which has medicinal properties like Anti-allergic, Anti-cancer, Anti-oxidant, Anti-inflammatory, Antiviral and

polyacetylenes anti-tumor, immunomodulatory, neuroprotective, anti-depression, anti-obesity, hypo-glycemic, antiviral, antibacterial, antifungal, hepatoprotective and reno protective activities. **Carduoideae and cichorioideae** has **terpinoids** abundantly which has medicinal properties like Antitumor, anti-inflammatory, antibacterial, antiviral, antimalarial effects, promote transdermal absorption, prevent and treat cardiovascular diseases, and have hypoglycaemic activities; **Cichorioideae** has **polyacetylenes** abundantly. Terpenoids here includes all monoterpenes, diterpenes, triterpenes, sesquiterpenes.

The drugs categorised by their specific action are-

- **Anti convulsive remedies**- Abrotanum, Absinthinum, Artenisia vulgaris, Cina, Chamomilla, Tanacetum vulgare, Eupatorium aromaticum, Pyrethrum parthenium etc.
- **Anti-helmenthic remedies**- Abrotanum, Absinthinum, Artemesia vulgaris, Cina, Chamomilla, Tanacetum, santolina, santonin, Vernonia anthelmentica etc.
- **Anti-venom**- Eupatorium ayapana, Echinacea angustifolia, Guaco
- **Anti-haemarrhagic**- Millifolium, Erigeron, Eupatorium ayapana, Erechithites
- **Injury**- Millifolium, Calendula, Eupatorium perfoliatum, Arnica, Bellis per
- **Eye complaints**- Cineraria, Ambrosia artemisifolia, Guaco, Cardus Benedictus, Lappa arcticum
- **Gastric complaints**- Anthemis nobilis, Erigeron, Eupatorium aromaticum, Lapsana communis, Guaco, Ambrosia, Parthenium,

Silphium laciniatum, Wyethia helenoides, Tussilago fragrans, Cynera scolymus

- **Hypo- glyceamics**- Grindelia robusta, Eupatorium perfoliatum, Inula, Cynera scolymus, Galinsoga parviflora
- **Renal complaints**- Solidago (homoeopathic substitute for catheter), Eupatorium purpureum, Liatris spicata, Xanthium spinosum, Brachyglottis repens, Petasites hybridus, Tussilago petasitis, Senecio aureus
- **Hay fever**- Solidago, Ambrosia
- **Sore nipples**- Eupatorium aromaticum, Lapsa communis
- **Low fevers-** Eupatorium aromaticum, Echinacea purpurea
- **Chronic malarials**- Grindelia robusta, Eupatorium perfoliatum, Parthenium, Helianthus annus
- **Increased flow of milk**- Parthenium
- **Obesity-** Tussilago fragrans, Calea
- **Marasmus in children**- Abrotanum, Cina
- **After effects of quinine**- Parthenium
- **For Mashroom poisoning**- Absinthinum
- **For Rhustox poisoning**- Grindelia robusta, Echinacea angustifolia
- **Intercurrent remedy in TB-** Tussilago farfara
- **For Poison ivy**- Tanacetum vulgare
- **Insomnia-** Chrysanthemum leucanthemum, Senecio aureus
- **Homesickness**- Eupatorium purpureum, Centeurea tagana,
- **Hepato protectives**- Cardus marianus, Senecio aureus, Calea

- **Sciatica & arthritic complaints**- Gnaphalium polycephalum, Helianthus annus, Liatris spicata, Onopordum
- **Tooth complaints** - Anthemis pyrethrun, Chrysanthemum leucanthemum
- **Respiratory complaints**- Millifolium, Solidago, Ambrosia, Silphium laciniatum, Wyethia, Inula etc.

Among the plant kingdom homoeopathic preparations of composite family are more in number and their clinical utility also mentioned in table of active principles under column Homoeopathy and the specific actions of this Homoeopathic preparations mentioned above showing the clinical utility of this family.

As part of this study a general survey was conducted by me in the premises of GHMC & GHH, Kadapa. The outcome of the survey revealed most of the Compositae drugs are not being used in clinical practice– **reasons mainly**

- Those Homoeopathic drugs were not indicated in their practice.
- Less availability of those drugs.
- Those drugs were not in syllabus during their graduation & post graduation.
- Pharma companies were not even promoting those drugs in this area mainly they used to prefer physician needs.
- Less literature reviews

This study is helpful to the students and researches and practitioners to know the clinical utility of Asteracea family drugs, availability of literature enhance the scope of homoeopathy.

Homoeopathic pharmaceuticals are preparing 80 % of the composite drugs like Gnaphalium Leontopodium, Vernonia, Eupatoriun cannabinum, Haplopappus, Liatris spicata, Cynera, Spilanthus oleracea etc are manufacturing by schwabe, India.

Drugs used in **Ayurveda** mentiond in Ayurvedic Pharmacopoiea of india are – **part 1, volume 4** Sphaeranthes indicus, Inula racemosa root ; **Volume 3-** Pluchea lanceolata,Vernonia cinerea, Doronicum hookeri, Carthamus tinctorius; **Volume 5** Centratherum anthelminticum, **Volume 1**- Eclipta alba- indigestion, cough, Saussurea lappa- respiratory complaints, **Volume 6-** Artemisia absinthium, Chrysanthemum indicum, Wedelia chinensis.

Asteracea family medicinal plants list mentioned in Annexures

Summary and Conclusion

SUMMARY AND CONCLUSION

This study explain the Compositae family medicinal plants used in Homoeopathy in detail starting from identification, collection, preparation, standardisation mentioned in different pharmacopoeias.

All pharmacopoeias followed old method (Hahnemann method) and new method of preparation of drugs with few changes. But few composite drugs available in particular pharmacopoeias only for example-

- **Drugs seen only in EHP** are-

  volume 1- Anthemis pyrethrum, chrysanthemum leucanthemum, calea zatachichi, centurea tagana

  Volume2- Haplopappus bayahulen, Eupatorium cannabinum, Liatris spicata, Gnaphalium Leontopodium, Galinsoga parviflora, Plumbago littoralis, Lappa Arctium

  Volume 3- Helianthus tuberosus, Pyrethrum parthenium, Spilanthus oleracea, Senecio jacobia, Onopordum
- **Drugs seen only in HPI**- Eclipta alba (V9), Petasitis hybridus(V5)
- **Drugs seen in polyglottica only**- Achilea Eupatorium, Gnaphalium Arenarium, Hieracium pillosella, Hieracium umbellatum, Lactucarium gallicum . Materia medica literature for these drugs not available.
- Lapsana communis available in materia medicas , same dru monograph is not available in pharmacopoeia.

According to Murphy's planets – Murphy classified Homoeopathic & Herbal remedies based on personality, behaviour, organs, systems, & tissues to cure acute and chronic diseases, mentioned under the respective medicine in this study. The planets represents

SUN- Heart & Circulatory system

Moon- Brain & Endocrine system

Mars- Blood & Immune system

Mercury- Lungs & Respiratory system

Jupitar- Liver & Digestive system

Venus- Kidneys and Urogenital system

Saturn- Spleen &Musculoskeletal system

Plumbago littoralis given in EHP is mentioned under composite which belongs to plumbagonacea family creates confusion and needs correction.

- Drugs like Eclipta alba, Haplopappus bayaheulen, Calea, Gnaphalium Leontopodium, Helianthus tuberosus, Artemisia Judaica and contra, Vernonia, eupatorium cannabinum are seen in Pharmacopoieas are not available in materia medica's.
- Cynera scolymus, Galinsoga parviflora , onopordum, petasitis , Calea are seen in O.A. Julian Homoeopathic Materia Medica of 131 new Hom. Therapeutics.
- Calea, Galinsoga parviflora, Centaurea tagana, Onopordon acanthium, Pyrethrum parthenium, Siegesbeckia orientalis etc mind symptoms seen in a book named **Perfect Materia medica of Mind by Seghal.**

CONCLUSION

- This study has given explanation about Homoeopathic preparations of 74 drugs under composite family catagorised as Asterioidae, Carduoideae, Cichorioideae subfamilies and their clinical utility.
- By collecting information from Pharmacopoieas, Materia medicas, botany books the composite family homoeopathic drugs identification, preparation, standardisation, clinical utility based on their pharmacological action are available at one place which is useful for practioners, students & researchers.
- The composite family has wide range of clinical utility like diabetes, hypertension, goitre, snake poisoning, for worm infestations with their complications, convulsions, for injuries, arthritic complaints, eye complaints, skin complaints, children remedies, gastric complaints, respiratory complaints, haemarrhages, dysmenorrhoea etc .
- This study brings to our notice that out of 74 drugs approximately 20 drugs are using in day to day practice. Practitioners are not much aware of other rare medicines in this family like liatris spicata for generalised anasarca; anthemis cotula as diaphoretic; anthemis pyrethrum for toothache paralitic affects of the tongue; calea for hydrophobia, chronic hepatitis, chronic cholecystitis; cynera for obesity with boulimia,unstable arterial hypertention; galinsoga for tuberculosis, insipid diabetes, asthama; onopordum for left coxalgia etc. This study enlighten about other composite remedies with their clinical utility for practitioners, students to heal sick individual

- Some drugs described in Pharmacopoieas are not available in Materia medicas.
- Some drugs available in Materia medica are not described in Pharmacopoieas.
- Some of the drugs which are not available in Materia medica have been manufactured by some pharma companies. So there is need for those drugs to be mentioned in the literature for practitioners and students.
- The pharmacopoeias need completeness regarding standardisation of this family drugs, drug proving literature of those drugs, preparation of drugs. So there is need for further study in standardisation, literature availability of those drugs.

SCOPE & **LIMITATIONS**

- This study mentioned about the availability of literature on asteracea family from different pharmacopoeias, materia medica books, botany books at one place and their clinical utility.
- Literature of Asteracea family is scattered in many books. By this study contents are indexing at one place, showing path to further study.
- The entire dissertation is limited based on the availability of literature and conclusion given based on literature availability.
- As part of field study visited yogi vemana university botanical garden Kadapa, shardha krishna homoeomedical college botanical garden, kulashekaram, tamilnadu.

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Annexures

ANNEXURES

Standardisation of drugs list done by CCRH

S. NO	DRUG NAME	PHARMACOGNOSTIC	PHYSICO CHEMICAL	PHARMACOLOGICAL
1	Abrotanum	√	√	
2	Absinthium		√	
3	Arnica Montana	√	√	
4	Artemisia Vulgaris	√	√	
5	Bellis Perennis	√	√	√
6	Blumea Odorata	√	√	
7	Calendula Officinalis	√	√	√
8	Carduus Benedictus	√	√	
9	Carduus Marianus			
10	Chamomilla	√	√	
11	Cina	√	√	
12	Cineraria Maritima	√	√	
13	Echinacea Angustifolia		√	
14	Erigeron Canadense	√	√	

15	Eupatorium Perfoliatum	√	√	
16	Eupatorium Purpurium			
17	Gnaphalium Polycephalum	√	√	
18	Grindelia Robusta	√	√	
19	Helianthus Annus	√	√	
20	Galinsoga parviflora	√	√	
21	Lappa Major	√	√	
22	Millefolium	√	√	
23	Lactuca sativa	√	√	
24	Solidago Virgaurea	√		
25	Tanacetum Vulgare	√	√	
26	Taraxacum	√	√	
27	Tussilago Petasites	√	√	
28	Cynera Scolymus	√	√	√
29	Echinacea Purpurea	√	√	
30	Lactuca	√	√	
31	Xanthium stramonium	√	√	
32	Parthenium	√	√	

33	Petasites Hybridus	√		
34	Santolina Chamaecyparissus	√	√	√
35	Siegesbeckia Orientalis	√	√	√
36	Vernonia Anthelmintica	√	√	
37	Silphium laciniatum	√	√	
38	Haplopappus	√		
39	Blumea lacerate	√	√	
40	Chrysanthemum parthenium	√	√	
41	Chrysanthemum cinerarifolium	√	√	
42	Cichorium intybus	√	√	
43	Eclipta alba	√	√	
44	Artemisia annua	√	√	

ACTIVE PRINCIPLES [7 to 62]

DRUG	ACTIVE PRINCIPLES	ACTION	IN HOMOEOPATHY Clinically
		ANTHEMIDEAE	
ABSINTHINUM	Thujyl alcohol esters, **α – thujone, β thujone**, camphene, α – cadinene, guaiazulene(Z)- epoxyocimene, (E)-sabinyl acetate, (Z)- chrysantenyl acetate, artemethin, rutoside, **anabsinthin, anabsin, artabsin, absintholide**	Anthelmintic, Antiprotozoal, Antibacterial, Antifungal, stimulating digestion, appetite, Antiulcer, Hepatoprotective, Anti-inflammatory, cytotoxic, neuroprotective, Analgesic, Antidepressant, precognitive, Antioxidant	Brain, congestion of. Chlorosis. Dyspepsia. Epilepsy. Nervousness. Otorrhoea. Restlessness. Sleeplessness. Spine, congestion of. Typhoid.
ABROTANUM	D-borneol, L-borneol, D- camphor, L-camphor, trans-sabinyl acetate, 1,8-cineole, L, D- **piperitone**, cis-davanone, trans- davanone, Artemicinin, **Abrotine**, Herniarin, Artemisetin.	Anti-bacterial, Anti-oxidant, Anti-cancer, Anti-allergic properties, Anti-fungal, Anti-plasmodial, Insect repellent, Anti-tumour activities	Boils. Chilblains. Epilepsy. Gout. Hæmorrhoids. Hectic fever. Hydrocele. Indigestion. Lienteria. Marasmus. Myelitis, chronic. Nose-bleed. Paralysis. Rheumatism. Umbilicus, oozing from. Worms
ARTEMISIA VULGARIS	Psilostachin, psilostachin C, **vulgarin, artemisinin**, modhephene,	Antioxidant, Hypolipemic, Hepatoprotective, Antispasmolytic,	Catalepsy. Chorea. Convulsions. Dysmenorrhoea.

	presilphiperfol-7-ene, silphin-1-ene, (-)- isocomene, (-)- alpha-isocomene, Rutoside, luteolin, eriodictyol, Esculin, esculetin, umbelliferone Caffeic acid, quinic acid, protocatechuic acid glucoside, Artemesinic acid, Artemesinin b	Bronchodilatory, Antimalarial, Cytotoxic, Estrogenic, Analgesic, Antihypertensive	Epilepsy. Hydrocephalus. Hysteria. Somnambulism. Worms.
CINA	Betaine, **santonin**, artemisia oil or armoise oil, artemisin, artemisinin, cineol, hispidulin, memetin, absinthin, Pectolinarigenin	Anti -inflammatory, Anti -malarial, Anti -spasmodic, Anthelmintic, digestive stimulent	Abdomen, distended. Anæmia. Anus, irritation of. Asthenopia. Asthma. Bronchitis. Borborygmi. Chorea. Colic. Convulsions. Cough. Dentition. Diarrhoea. Enuresis. Eyes, affections of. Hydrocephaloid. Intermittent fever. Leucorrhœa. Neuralgia. Remittent fever. Scarlatina. Sight, affections of. Spasms. Strabismus. Twitchings. Urine, milky. Whooping-cough. Worms.
ANTHEMIS NOBILIS	**Chamazulene**, bisabolol- terpenoids	Carminative, antiemetic, antispasmodic, sedative properties	Ascarides. Colic. Dyspepsia. Headache. Liver, congestion of

	Apigenin, luteolin, quercetin- flavonoids Scopoletin-7-glucoside- coumarins, others- angelic& tiglic acid esters**,** **anthemic acid**, choline, phenolic & fatty acids		
ANTHEMIS PYRETRUM	pellitorine, **anacycline**, **spilanthol,** pyracyclumine A, and agrocybenine	anesthetic, anti-depressant, anti-epileptic, anticonvulsive, and blood circulatory activities	Toothache, Headache, Paralytic affections of the tongue, muscles of deglutition.
CHAMOMILLA	Terpenoids- **α – bisabolol**, α-bisabolol oxide A&B, **chamazulene**, sesquiterpenes Flavonoids- apigenin, luteolin, quercetin Coumarins- **umbelliferone** Spiroethers- en-yn dicycloether, others- anthemic acid, choline, tannin, polysaccharides	Anti inflammatory, Anti malarial, Anti spasmodic, Anthelmintic, digestive stimulent Anti neoplastic, Anti oxidant, Antimicrobial, Anti allergic, Anti inflammatory, Neuro psychiatric	Acidity. Anger. Asthma (from anger). Blepharospasm. Catarrh. Coffee, effects of. Colic. Convulsions. Cough. Cramp. Croup. Dentition. Diarrhoea. Dysmenorrhoea. Dyspepsia. Earache. Eyes: blepharitis ; ophthalmia. Eructations. Erysipelas. Excitement. Excoriation. Fainting fits. Fevers. Flatulence. Flatulent colic. Gout. Gum-rash.

			Headache. Hernia. Hysterical joint. Influenza. Jaundice. Lienteria. Labour : disorders of ; after-pains. Mastitis. Menstruation, disordered. Miliary eruption. Milk-fever. Miscarriage. Mumps. Neuralgia. Parotitis. Perichondritis. Peritonitis. Pregnancy, disorders of. Red-gum. Rheumatism. Salivation (nocturnal). Sciatica. Screaming. Sensitiveness. Spasms. Speech, affections of. Toothache. Ulcers. Uterus, diseases of. Waking, screaming on. Whooping cough.
CHRYSANTHIMUM LEUCANTHEMUM	Acacetin, Apigenin, Luteolin & Quercetin **Pyrethrins**, Allethrin	Antimutagenic activity Antifungal activity	Insomnia and night sweats, right -sided pain in bones of jaws and temple, hyperesthesia of nervous system

MILLIFOLIUM	Betonicine, Stachydrine, Trigonelline, **Achilleine**- Alkaloids Apigenin, Luteolin, Quercitin Salicylic acid **Achillin**, Achillicin Sabinene, **Azuline**, Coumarins, unsaturated fatty acids	Gastroprotective, Antibacterial, Antioxidant, Antiseptic, Expectorant, Carminative activity, cholagogue activity, Antithrombotic activity.	Asthma. Cancer. Chlorosis. Consumption. Dentition. Diarrhoea. Dysmenorrhoea. Enuresis. Epilepsy. Fistula lachrymalis . Hæmatemesis. Hæmaturia. Hæmoptysis. Hæmorrhages. Hypochondriasis. Hysteria. Leucorrhoea of children. Lochia, too profuse; suppressed. Milk, absence of. Nipples, sore. Nose, bleeding of. Puerperal convulsions. Puerperal fever. Rodent ulcer. Sterility. Sycosis Hahnemanni. Tetanus. Varices.
SANTOLINA CHAMARCYPARISSUS	**1,8 – cineole**, β – eudesmoi, terpinene-4-ol, spathulenol, myrtenol, carvacrol, borneol Combination of 1,8- **cineole** & camphor**, nepitin.**	Anti- bacterial, Anti-fungal activity Anti microbial activity	Bitter, stimulating chamomile-like aroma, Reduces inflammation, improves digestion,

			Stimulates uterus (menstrual problems), liver (jaundice), expel intestinal parasites Externally: Wash for stings, bites, minor wounds, skin inflammation, ringworm, scabis, Rub for rheumatism and painful Joints
TANACETUM VULGARE	α humulene, α pinene& caryophyllene oxide – in **essential oil** – by inhibiting NO production, inhibits intracellular DCFH oxidation Camphor, borneol, 1,8- cineole	Anti -inflammatory, Anti- oxidant, Antibiotic activity	Abortion. Amenorrhoea. Chorea. Dysmenorrhoea. Epilepsy. Eyes, sclerotica inflamed. Hydrophobia. Labia, abscess of. Paralysis. Strabismus (right inward). Worms.
ASTEREAE			
BELLIS PERENNIS	**Bellisoside** d,e,f; bellissaponin derivatives	Anti-inflammatory, Antibacterial, Antioxidant, Cytotoxic, Antimicrobial, Antifungal, Antiparasitic, Anaesthetic,	Acne. Arteries, diseases of. Boils. Brain, softening of. Change of Life. Exudations. Masturbation. Fatigue. Giddiness. Gout. Headache.

		Antihyperlipidemic, and Expectorant.	Indigestion. Mydriasis. Overwork. Pregnancy, complaints of. Psoriasis. Railway spine. Rheumatism. Sleeplessness. Spleen affections. Stasis. Traumatism. Tumours. Uterus, fatigued. Varicosis.
ERIGERON CANADENSIS	**erigeron oil**- d-limonene and terpineol, trans-alpha-bergamotene, scutellarin, luteolin-7-O-beta-D-glucuronide, quercetin, qu ercetin-3-O-β-D-glucopyranoside, and luteolin.	antimicrobial, antioxidant, anticoagulant, antiinflammatory, anticancer, mutagenic, gastric protective, and skin depigmentation activity.	Black eye. Bruises. Cough. Dysuria. Gleet. Gonorrhoea. Hæmatocele. Hæmorrhages. Hæmorrhoids. Placenta prævia. Proctalgia. Spermatorrhoea. Wounds.
GRINDELIA ROBUSTA	1,5-dicaffeoylquinic and chlorogenic acid • uercetin- methylethers, kaempferol-3-methylether, and kaempferol-3,7-dimethylether.	Anti -inflammatory activity	Asthma. Bites. Bronchitis. Cheyne-Stokes breathing. Conjunctivitis. Emphysema. Erythema. Eyes, pains in. Glaucoma. Heart, affections of. Iritis. Itching. Liver, pain in. Pruritus vulvæ. Pruritus vaginæ.

	• borneol, alpha pinene, trans-pinocarveol, bornyl acetate, and limonene. • matricarianol and marticarianol acetate.		Rhus-poisoning. Spleen, pain in. Ulcers.
GRINDELIA SQARROSA	Grindelic acid, Apigenin, 6-oxygrindelic, 18-hydroxy-6-oxygrindelic, 7-alpha oxodihydrogrindelic and 8-alpha-oxodihydrogrindelic acids.	Anti inflammatory	Spleen , Liver, Nervous system, lungs, eye symptoms,
HAPLOPAPPUS	essential oil- eicosane , benzene , azulene , naphthalene , and the sesquiterpenes bergamotol andα-cadinol (Becerraetal.,2010). quercetin, quercetin3-methyl ether, rhamnetin, isorhamnetin, kaempferol, rhamnocitrin, velutin, sakuranetin, persicogenin, sternbin,7,4′-	Anti -inflammatory, Anti -oxidant activity Anti- depressant	Hypertension

	dimethylaromadendrin ,7-O-methylaromadenrin,7,3′-di-O-methyltaxifolin , dihydromyricetin , prenyletin (Cum3), and3,5 dicaffeoylquinic acid (Cin12) (Schwenker et al., 1967; Hörhammer et al., 1973;Nuñez-Alarconet al., 1993;Veraet al., 20		
SOLIDAGO	C6-c1 compounds, c6-c2, c6-c3 compounds, umbeliferone,	diuretic, anti-inflammatory, antioxidant, analgesic, spasmolytic, antibacterial, and immunomodulatory properties.	Albuminuria. Calculus. Croup. Deafness Dysuna. Eruptions. Gout. Leucorrhoea. Ophthalmia, .scrofulous. Pho^phaturia. Prostate^ enlarged. Rheumatism. Sciatica. Scrofula. Urine, scanty; suppressed.
CALENDULEAE			
CALENDULA OFFICINALIS	calenduladiol-3-Opalmitate, calenduladiol-3-O-myristate, oleanolic acid saponins: calenduloside AH, oleanane triterpene glycoside: calendula glycoside A,	Anti -inflammatory, Anti -oxidant, Anti -microbial.	Abscess. Balanitis. Breast, suppurating; nodosities in. Bubo. Burns. Carbuncle. Chilblains. Deafness. Eyes, inflamed. Fever. Fistula.

	calendulaglycosideA6-O-n-methylester, calendulaglycosideA6"-O-n-butylester, calendula glycoside B, calendulaglycosideB6-O-n-butylester, calendula glycoside C, calendula glycoside C 6-O-n-methyl ester, calendula glycoside C 6- O-n-butyl ester, calenduloside F6-O-n-butyl ester, calenduloside G6-O-n-methyl ester, glucoside of oleanolic acid (mainly found in roots of grown and senescing plants) I, II, III, VI, VII,		Glandular swellings. Jaundice. Labour. Nails, pulp of,inflamed. Nipples, sore. Suppuration. Tetanus. Ulcers. Uterus, inflammation of ; cancer of ; offensive discharge from. Varicosis. Whitlow. Wounds.
EUPATORIEAE			
EUPATORIUM AROMATICUM	Terpinoids	Anti -fungal activity	Ague. Aphthæ. Gravel. Neurasthenia
E. AYAPANA	7-ethoxy coumarin **(ayapanin**) and 6, 7-dimethoxy coumarin **(ayapin**) , Carotene, vitamin-C, and stigmasterol, Thymohydroquinone and terpenoids,	antiperiodic, antiseptic, antineoplastic, cardiotonic, diuretic, emetic, antiulcer, astringent, expectorant, antitussive, anti bacterial activity	Snake bite, Haemarrages

E. CANNABINUM	feupatorin, eupatilin, quercetin, eupatolide and eupatoriopicrin	Antioxidant, antiproliferative	nervous irritability and inflammation of bronchial tubes.
E. PERFOLIATUM	eupafolin and sesquiterpen lactones. hyperoside, isoquercitrin, 5-caffeoylglucaric acid, 3-caffeoylquinic acid and 3,5-dicaffeoylquinic acid	Antiplasmodial effect, Anti inflammatory	Anus, herpes of. Back, pain in. Bilious fever. Bones, pains in. Cough. Dengue. Diarrhoea. Fractures. Gout. Hiccough. Hoarseness. In digestion. Influenza. Intermittent fever. Jaundice. Liver, soreness of. Measles. Mouth, cracks of. Ophthalmia. Relapsing fever. Remittent fever. Rheumatism. Ringworm. Spotted fever. Syphilitic pains. Thirst. Wounds.
E. PURPUREUM	5-acetyl-6-hydroxy-2,3-dihydro-cis-2-isopropenyl-3-tiglinoyloxybenzofuran euparin, cistifolin, and euparone	Anti-inflammatory and antirheumatic	Albuminuria. Calculi. Cystitis. Diabetes. Dropsy. Enuresis. Gravel. Headache. Home-sickness. Hysteria. Impotence. Indigestion. Intermittent fever. Renal colic. Rheumatism. Sciatica. Strangury. Throat,

			sore. Urine, retention of. Vomiting.
GUACO	• Coumarin, O-coumaric acid,Kaurene-type diterpene,Kaurenoic acid,Cinnamoyl grandifloric acid	Anti -inflammatory, anti-carcinogenic effect	Cholera. Diarrhoea. Hydrophobia. Leucorrhoea. Paralysis. Phos phaturia. Rheumatism. Spine, affections of. Tongue, paralysis of.
LIATRIS SPICATA	3-glucoside, 3-rutinoside and 3-glucoside-7-rhamnoside of quercetin.	Carminative, Diuretic , Stimulant, Sudorific Expectorant, Analgesic	Diarrhoea. Dropsy. Renal dropsy. Ulcers

GNAPHALIEAE			
G. LEONTOPODIUM	leontopodic acid and leontopodic acid B	antioxidant, anti-inflammatory, anti-microbial.	Memory loss, Stomch pain, Constipation, Teeth grinding, Back pain, Lock jaw
G. POLYCEPHALUM	5-Hydroxy-3,7,8- trimethoxyflavone, Gnaphaliin A, 3,5,7- Trihydroxy-6, 8- dimethoxyflavone	Anticomplementary, Antioxidant, Antitussive, Insect antifeedant, Antiinflammatoty, Cytotoxic,	Anterior crural neuralgia. Cholera. Diarrhoea. Dysmenorrhoea. Gout. Lumbago. Prostate gland,

		Hypoglycemic, Antihypouricemic activities.	irritation of. Rheumatism. Sciatica.
G. ULIGINOSUM	gnafalosides A and B, luteolin, scutellarein, glycoside scutellarin, rutin, tricin, eupafolin, quercetin), chlorogenic and caffeic acids, carotenoids, thiamine, resins, tannins, alkaloids (gnafalin), phytosterols, and ascorbic acid , phytol, scopoletin, linalool, squalene	Antimicrobial, Antioxidant, Antihistamine	sleep problems, anxiety and deal with depression healing wounds, ulcers, burns, or head lice
HELIANTHEAE			
AMBROSIA ARTEMISIAFOLIA	eudesmane-type, germacrane-type, bisabolane-type and guaiane-type	Anti toxic, anti allergic activity	Coryza, Hay fever
CALEA ZACATECHICHI	Germacrolides, Calein A ,Calein B , Calein E	anthelmintic, antibiotic, cytotoxic and antiparasitic activities	anxiety, insomnia, memory and thinking skills, diabetes, and headache
ECHINACEA ANGUSTIFOLIA	Alkamides, caffeic acid derivatives, and polysaccharides , cynarin	Immunomodulator, anti toxic, anti viral activity, anti inflammatory	Appendicitis. Bites of rabid animals. Blood-poisoning. Carbuncles. Diphtheria. Enteric Fever. Gangrene. Poisoned wounds. Pyæmia.

			Rhus- poisoning. Scarlatina. Septicemia. Snake bites. Struma. Syphilis. Typhoid. Ulcers. Vaccination, effects of
E. PURPUREA	Alkamides, caffeic acid derivatives, and polysaccharides , mainly cichoric acid; polyacetylenes	Immunomodulator, anti toxic	Diphtheria. Putrid fevers.
ECLIPTA ALBA	• Flavonoids: These include luteolin, apigenin, diosmetin, buddleoside, and apigenin-7-o-glucoside. • Isoflavones: These include paratensein and orobol, as well as their subtypes. • Other phytoconstituents: These include wedelolactone, Ecliptalbine ,eclalbasaponins, ursolic acid, oleanolic acid, and apigenin.	Antihepatotoxic properties: Antihyperlipedemic properties: anticancer,anti inflammatory, anticancer activites, immune modulator, alopecia	chologuague and deobstruent in hepatic enlargement, for jaundice and other ailments of the liver and gall bladder

HELIANTHUS ANNUS	helikauranoside A, helianthosides 4 (4), caffeic acid, heliangolide derivatives	gantiinflammatory, anti-oxidant, antitumor, antiasthmatic, antigen, antipyretic, astringent, antihypoglycemic effect, antifungal activities, cathartic, diuretic, stimulant, vermifuge, vulneray purposes and antimicrobial activities	Cold. Constipation. Epistaxis. Hæmorrhoids. Nasal obstruction. Spleen, affections of. Throat, sore. Urticaria. Vomiting. Wounds.
HELIANTHUS TUBEROSUS	Inulin, Phenolic acids including chlorogenic acids	Ant- oxidant, antibacterial activity	Cold. Constipation. Epistaxis. Hæmorrhoids. Nasal obstruction. Spleen, affections of. Throat, sore. Urticaria. Vomiting. Wounds.
PARTHENIUM	Parthenin, gallic acid, chlorogenic acid, Elagenic acid, Hysterin, ambrosin, angoletin	Anti oxidant, febrifuge, emmenagogue, antidysenteric	-Abortion. Amenorrhoea. Cheyne-Stokes breathing. Debility. Dyspepsia. Ear, affections of. Fevers. Headache ; extending to nose. Liver, pain in. Milk, increased. Neuralgia, periodic. Salivation. Spleen,

			affections of. Syncope. Toothache. Vision, disordered.
PYRETHRUM PARTHENIUM	Parthenolide,	Anti inflammatory	Convulsions. Delirium. Dysentery. Fevers. Loquacity. Rheumatism.
RUDBECKIA HIRTA	germacrene D, δ-cadinene, and rudbeckolide, which has 5-LOX inhibitory activity. thiophenes, thiarubrines, and tridecapentaynenes, eupatolitin and patuletin,	anti-inflammatory and antimicrobial properties anti tumor, immune modulator, antimycin bacterial	Earaches, worms, colds, sores, snakebites &swelling.
SIPHIUM LACINIATUM	eight diterpenes, five acyclic triterpenes,four pentacyclic triterpenes, and five triterpene saponins	Anti oxidant, anti inflammatory activity	^Asthma. Bladder, catarrh of. Bronchitis. Cancer.
SPILANTHUS OLERACEA	spilanthol and acmellonate	antioxidant, anti-inflammatory, immunomodulatory, antinociceptive, pronociceptive	toothache, throat complaints, stomatitis, stammering , gout, bladder pain

		antibacterial, antifungal, antidiabetic, diuretic, and vasorelaxant effects	
WYETHIA HELENIOIDES	6-C-prenylorobol, 6-C-prenylorobol 3′-methyl ether, orobol 7,3′-dimethyl ether, 8-*C*-prenyldihydroisorhamnetin, 7,8-dihydrooxepinocriodictyol, 7,8-dihydrooxepinodihydroquercetin and 3′,4′-dihydrooxepino-6′-hydroxybutein.	Anti inflammatory	Amenorrhoea. Asthma. Constipation. Cough. Debility. Diarrhoea. Dysmenorrhoea. Epiglottis, affections of. Fever. Haemorrhoids. Headache. Hiccough. Indigestion. Influenza, Nervousness. Ovaries, pain in. Post- nasal catarrh. Salivation. Throat, sore. Uvula, affections of.
XANTHIUM SPINOSUM	Xanthanolides, xanthinin, xanthatin, Stozolicin,solistitialin	cytotoxicity, antioxidant, antibacterial, antifungal, antidiabetes, and hepatoprotective activities.	hydrophobia, rabies, fevers, diarrhoea, cancer, and rheumatoid arthritis.
INULEAE			
BLUMEA ODORATA	trans-gastrolene, (-)-bromelain, γ-eudesmol, α-eudesmol, camphor,	antioxidant, antibacterial, antifungal, anti-inflammatory,	Cough, fever, hoarseness, Haemorrhages

	anthocyanin, and gastrolene oxide. tanshinone IIA, aurantio–obtusin, and cryptotanshinone. Aurantiamide acetate and N–phenyl–1–naphthylamine. Blumeatin A, Balsamiferine H	hypolipidemic, anti-infertility, liver protection, anti-diabetes, stomach protection, anti-tumor	
INULA HELIUM	• Alantolactone: A polyvalent compound with anti-inflammatory, anti-diabetic, neuroprotective, and antitumoral properties • Isoalantolactone: A compound that has anti-cancer effects • 5α-epoxyalantolactone: A compound that has antiproliferative effects in acute myelogenous leukemia progenitor cells	Antimicrobial, Antiinflammatory	Backache. Cough. Cramp. Dysmenorrhoea. Erysipelas. Leucorrhoea. Rectum, pain in. Sciatica. Toothache.

	• Igalan: A compound that has protective and anti-inflammatory activity • Costunolide and isocostunolide: Compounds that have anti-proliferative, anti-metastatic, and neuroprotective effects • Inulin: A storage polysaccharide that is a polymer of fructose • Helenin: A phytochemical compound that is made up of alantolactone and isoalantolactone		
MADIEAE			
ARNICA MONTANA	esters of helenalin and 11α,13-dihydrohelenalin, as well as other carboxylic acids 2,5-Dimethoxy-p-cymene and thymol methyl ether.	Anti-inflammatory, Anticancer, Antioxidant, Antimicrobial, Antiplatelet, mmunomodulatory, and Anti-osteoarthritis	Abscess. Apoplexy. Back, pains in. Baldness. Bed-sores. Black eye. Boils. Brain, affections of. Breath, fetid. Bronchitis. Bruises.

			Carbuncle. Chest, affections of. Chorea. Corns. Cramp. Diabetes. Diarrhoea. Dysentery. Ecchymosis. Excoriations. Exhaustion. Eyes, affections of. Feet, sore. Hæmatemesis. Hæmaturia. Headache. Heart, affections of. Impotence. Labour. Lum bago. Meningitis. Mental alienation. Miscarriage. Nipples, sore. Nose, affections of Paralysis. Pelvic-hæmatocele. Pleurodynia. Purpura. Pyæmia. Rheumatism. Splenalgia. Sprain. Stings. Suppuration. Taste, disorders of. Thirst. Traumatic fever. Tumours.

			Voice, affections of. Whooping-cough. Wounds. Yawning.
MILLERIEAE			
GALINSOGA PARVIFLORA	quercetin, beta sitosterol, gallic acid, kaempferol, and hydrobenzoic acid.	antibacterial, antifungal, antioxidant, and antidiabetic properties.	Influenza, Asthama, Insipid diabetes, Dyspepsia
SIEGESBECKIA ORIENTALIS	f 3, 7-dimethyl quercetin, orientin, Heneicosanol,	antimicrobial, antioxidant, antidiabetic, antihyperlipidemic, and anti-inflammatory	Fever, fear, time passes too quickly, appears shorter
PLUMBAGO LITTORALIS	*E*-caryophyllene; 2) germacrene D; 3) bicyclogermacrene; 4) *δ*-cadinene, plumbagin	Anti oxidant activity	Costiveness. Eyes, inflammation in. Fever. Kidneys, pain in. Saliva, milky.
SENECIONEAE			
BRACHY GLOTTIS REPENS	Pyrrolizidine alkaloids	primarily affects the kidneys and bladder, producing symptoms of albuminuria and urinary discomfort. It may also cause itching in the ears and nostrils, oppression of the chest, and writer's cramp.	Bright's-disease. Dysmenorrhoea.

CINERARIA MARITIMA	Cinalbicol and cinariolide	Anti cataract activity	Cataract. Corneal opacity.
ERECHTHITES HIERACIFOLIA	α-pine, ne ocimene (E)-caryophyllene and, myrcene, (E)-β- germacrene D	Anti larvicidal activity	Diarrhoea. Gonorrhoea. Hæmorrhages. Metrorrhagia. Orchitis.
PETASITES HYBRIDUS	senecionine, integerrimine, retrosine, seneciphylline, jacobine, senkirkin,Petasin and its isomers e, isopetasin	Antiinflammatory, hepatotoxic and carcinogenic activity, Anti spasmodic activity	urinary tract problems, menstrual pain and cramps, migraine headaches, bronchial asthama
TUSSILAGO FARFARA	senkirkine ,senecionine. Pyrrolizidine alkaloids, tannins, mucilage, ferulic acid, triterpene etc. tussilagone	Antiinflammatory, hepatotoxic and carcinogenic activity Antioxidant, Anti migraine activity	Coughs. Scrofula.
T. FRAGRANS	Isopetasol, Isopetasin ,	Antioxidant, Anti migraine activity	Corpulence, plethora
T. PETASITES	(eremophilanes, furanoeremophilanes, bakkenolides)	anti-spasmolytic, hypotensive, and anti-asthmatic properties.	Gonorrhcea. Headache. Lumbago. Night-sweat. Pylorus, affections of. Throat, sore. Tibia, pain in. Uvula, burning in.

SENECIO AUREUS	senecionine, riddelline, retrorsine, floridanine, monocrotaline, and otosenine	anti-hemmorrahic, a diaphoretic, a stimulant	Amenorrhuea. Ascites. Coryza. Cough. Dropsy. Dysmeiiorrheea. . Dysuria. Epistaxis. Fainting. Gleet. Gonorrluca. Haemorrhages. Home-sickness. Hysteria. Kidneys, inflammation of. Lumbago. Mania. Menorrhagia. Menstruaiiotty delayed ; early, an<l profuse ; obstructed ; vicarious. Nails, brittle. Nervousness, Neurasthenia. Phthisis. Prostatitis. Puerperal mania. Renal colic. Sciatica. Spermatic cord, pain in. Wounds.
S. JACOBAEA	**Jacobine,** Senecionine, Seneciphylline Jacidine Jacoline	Carcinogenic activity	Cerebro spinal irritation, Rigid muscles- chiefly of neck,shoulder, also in cancer.

	Jaconine Jacozine **Retrorsine**:		
CARDUEAE			
CARDUUS BENEDICTUS	Artemisifolin,salonitenolide,a-amyrine,arctigenin,astragalin, polyacetalines, trachelogenin and arctigenin	appetite stimulant , diaphoretic, emmenagogue, galactagogue , emetic at high doses , anti-microbial/antibiot, anti-inflammatory , anti-proliferative, antitumour/antineoplastic , wound healing .	Amaurosis. Diarrhoea. Eyes, affections of. Fever. Headache. Joints, cracking of. Esophagus, stricture of. Varicosis. Vision, affections of.
CARDUUS MARIANUS	silydianin, silychristine, and silybin	Anti oxidant, Hepato protective, Anti diabetic, Hypocholestereimic, Anti cancer activities, Mushroom poisoning	Bronchitis. Dropsy. Epistaxis. Fever. Gall-stones. Hæmoptysis. Hæmorrhages. Hæmorrhoids. Influenza. Intermittents. Jaundice. Liver, affections of. Metrorrhagia. Neuralgia. Phthisis. Pleurisy. Rheumatism. Sciatica.

			Spleen, affections of. Typhlitis. Varicose veins.
CENTAUREA TAGANA	moschamine, cis-moschamine, centcyamine and cis-	Antibacterial, anti inflammatory, anti serotonin effect, gastro protective effect, diuretic effect, anti oxidant activity	Coryza. Diarrhoea. Eyes, inflammation of. Fevers. Home-sickness. Influenza. Intermittents. Sight, vanishing of.
CIRSIUM ARVENSE	• Hispidulin, luteolin, and tracin ,Acacetin, apigenin, and citronellol,Eriodictyol 7-O-glucoside, kaempferol, kaempferol 3-galactoside, kaempferol 3-glucoside, and isorhamnetin ,4-Vinyl guaiacol, 4-ethyl guaiacol, scopoletin, and 6,7-dimethoxycoumarin	Antimicrobial, Antioxidant, Antimicrobial properties	Skin infections, Hypertention
CYNARA SCOLYMUS	Cinarine, Cynaropicrin: Flavanoida,alkaloids,sesquiterpins,lignans	• Anti-inflammatory properties • Antioxidant properties • Liver-protective properties	IBS, Non ulcer dyspepsia, Hyperlipidaemia

		• Bile-expelling properties • Antimicrobial properties • Lipid-lowering properties • Neuroprotective • properties	
LAPPA ARTICUM	Cctigenin,diarctigeninaffeylquinic acids,inulin,arctinol, aretic acid, guainolides,ar	nti-inflammatory, anticancer, anti-viral, and antidiabetic properties.	Acne. Bunion. Dupuytren's contraction. Eczema serpiginosa. Eruptions. Glands, affections of. Gonorrhoea. Gout. Impotence. Leucorrhoea. Phosphaturia. Rheumatism. Ringworm. Scrofula. Sterility. Ulcers. Uterus, prolapse of.
LAPPA MAJOR	Arctigenin, tannins, arctiin, caffeic acid, beta-eudesmol, inulin, trachelogenin-4, sitosterol-beta-D-glucopyranoside, diarctigenin, lappaol, and chlorogenic acid	Anti tumour, Anti inflammatory, Anti leukemia, Anti viral, Anti colitis activities and vascular protective effects	Acne. Bunion. Dupuytren's contraction. Eczema serpiginosa. Eruptions. Glands, affections of. Gonorrhoea. Gout. Impotence. Leucorrhoea.

			Phosphaturia. Rheumatism. Ringworm. Scrofula. Sterility. Ulcers. Uterus, prolapse of.
ONOPORDUM	Onopordopicrin, 1-amino-2-propanol and stachydrine, β-eudesmol, aesculin and aesculetin	anti-inflammatory, antiproliferative, and cardiotonic properties	Sciatica, skin complaints, spasmodic cough
SAUSSUREA LAPPA	Lappadilactone,lactone cynaropicrin,dehydrocostus,germacrenssasuuranine, sussurreol	Anti inflammatory, Hepato protective, Anti tumour activity	Diurrtic, skin complaints, bronchitis, dyspepsia
CICHORIOIDEAE			
CICHORIUM INTYBUS	Chicorine	immunomodulatory, choleretic, hepatoprotective, hypoglycemic agent	Chronic constipation, Rhumatoid arthritis of psyco somatic origin, Bulimia, Hypochondriasis,Bronchial asthama, Amblayopia

LACTUCA SATIVA	Lactucaxanthin, anthocynin	Anti diabetic activity, Antioxidant activity	Soporific action, sleep provoking action
LACTUCA VIROSA	lactucic acid, lactucopicrin which is amorphous, 50–60% lactucerin (lactucone) and lactucin. Lactocerine is the main component of the lactucarium,	Pain relieving activity	-Angina pectoris. Anus, affections of. Ascites. Asthma. Constipa- tion. Cough. Diarrhoea. Globus hystericus. Gonorrhoea. Heartburn. Hysteria. Lactation. Levitation. Liver, affections of. Muscæ volitantes. Noises in ears. Pylorus, pain in. Sleep, excessive . Smell, illusions of. Spinal cord, pains in. Spleen, affections of. Whooping-cough. Yawning.

NABULUS SERPENTARIA	Lactucin, Lactucopicrin	Analgesic activity, sedative activity	Constipation. Ophthalmia.
TARAXACUM	aesculin taraxerol, cycloartenol, beta-sitosterol, and stigmasterol Taraxasterol, , cichoriin, esculetin, and scopoletin, quercetin, chrysoeriol, diosmetin, and luteolin	diuretic, laxative, cholagogue, anti-rheumatic, anti-inflammatory, choleretic, anti-carcinogenic and hypoglycemic activities	Ague. Bilious attacks. Debility. Diabetes. Gall-stones. Headache, gastric. Jaundice. Liver, affections of. Neuralgia. Night - sweats. Rheumatism. Tongue, mapped. Typhoid fever.
VERNONIEAE			
VERNONIA ANTHELMINTICA	• Delta-7-avenasterol, • Kaempferol: A flavonoid compound that can protect from AAPH-induced damage keratinocytes	anti-vitiligo, anti-diabetic, anti-inflammatory, antipsoriatic, neuroprotective, hepatoprotective, analgesic, antipyretic, antioxidant, antiparasitic, antimicrobial, antiproliferative, immunomodulatory	cough and asthma, For urinary retention, roundworm and threadworm infestation, fever, itching in arms and

	• Steroids, terpenes, phenolic acids, and fatty acids		legs, abdominal colic, bed wetting at night, teeth grinding, carcinoma of stomach, sterility in males and females

List of Medicinal Plants in Asteracea family [92,93,94]

Botanical name	Part used	Uses
Acmella calva (DC) R.K.Jansen	Leaves, flower heads	Wound healing, To stop bleeding
Ageratina Adenophora	Leaves	Wound healing
Ageratum conyzoides L.	Leaves	Wound healing, cardiovascular, dm
Anaphalis elliptica DC.	Leaves	Anti inflammatory
Bidens Pilosa L.	Whole plant	Rheumatism, Abdominal pain, immunity booster, cardiovascular, dm
Cotula australis Hook.f.	Whole plant	Headache
Elephantopus scaber L.	Root	To keep elephants away from peoples path, as talisman
Emilia scabra DC.	Leaves	Externally in children to remove black spots
Eupatorium odoratumL.	Root	Reduce body temperature
Gnaphalium polycaulon Pers	Leaves	Reduce nervous debility
Tithonia diversifolia A.Gray	Leaves	Reduce nervous debility
Vernonia divergens Eagew.	Leaves	Wound healing
Anaphalis triplinerus	Fresh leaves	Wound healing
Artemisia trichophylla Wall	Leaves& shoots	Earache, Purgative
Artemisia scoparia L.	Flowering head	Anti -malarial
Conyza canadensis (L)	Vegetative parts	Diuretic, Homeostatic
Dipsacus fullonum L.	Leaves	To cool inflammation of eyes
Echinops cornigerus L.	Aerial parts	To reduce fever of domestic animals
Inula royleana Clark	Whole plant	Diaphoretic, diuretic, expectorant
Lactuca serriola L.	Whole plant	Sedative, diaphoretic, diuretic, antiseptic
Saussurea heteromale Hand.	Seeds, roots	Liver, kidney, chest complaints
Saussurea costus Lipsch.	Root	Arthritis

Sonchus asperL.	Young shoots and flowers	Jaundice, constipation
Xanthium strumariumL.	Leaves	Skin diseases A urogenital, Dm
Artemisia annua	Whole plant	Malaria, Skin complaints
Artemisia dracunculus (Tarragon)	Root	Digestive problems, toothaches, menstrual Problems
Stevia rebaudiana	Whole fresh plant Q	Obesity, cardiovascular
Xanthium indicum	Whole plant	Prostrate adenoma, Anti cancer activity of cockleburB
Aertimisia dubai	Leaf and Young Shoot	Prostrate adenoma, Anti cancer activity of cockleburB
Ageratum conyzoides	Leaves	RS, SKIN
Artemisia biennis	Leaves	RS, SKIN
Aster amellus	Roots	RS, SKIN
Cichorium endivia	Seeds	RS, SKIN
Conyza sumatrensis	Leaves	RS, SKIN
Cousinia stocksi	Gums,Roots	RS, SKIN
Inula grantioides	Whole plant	RS, SKIN
Kussurec costus	Roots	RS, SKIN
Lactuca serriola	Whole plant	RS, SKIN
Lobelia inflata	Aerial plant	RS, SKIN
Pseudognaphalium luteoalbum	Leaves	RS, SKIN
Saussurea atkinsonii	Aerial parts	RS, SKIN
Spilanthes paniculata	Flower, Aerial part	RS, SKIN
Sphaeranthus indicus	Whole plant	RS, SKIN
Tagetes erecta	Whole plant, leaves	RS, SKIN
Tridax procumbens	Leaves	RS, SKIN, CVS
Veaernonia cinera	Roots	RS, SKIN
Aspilia natalensis	Leaves	Skin
Artemisia nilagirica	Leaves	Skin, Urogenitals
Anaphalis neelgerriana	Leaves	Skin
Aspilia Africana	Leaves	Skin
Centaurea benedicta	Whole plant	Skin
Chrysocoma ciliate	Whole plant	Skin
Pluchea lanceolata	Leaves	Skin
Senecio concolor	Leaves	Skin

Sonchus asper	Leaves	Skin, immune booster
Sonchus oleraceus	Whole plant	Skin
Sphaeranthus indicus	Leaves	Skin, urogenital
Tagetes patula	Leaves, root	Skin
Venidium arctotoides	Leaves	Skin
Erigeron annuus	Flowers	Immune boosters
Tagetes minuta	Leaves	Immune boosters
Artimisia herba-alba	Leaves , flowers	Urogenital problems
Baccharis genistelloide	Leaves, stem	Urogenital problems
Blumea laciniata	Shrub	Urogenital problems
Blumea mollis	Whole plant	Urogenital problems
Blumea oxyodonta	Leaf	Urogenital problems
Artimisia campestris L	Aerial part	Cardiovascular
Blumea lasiniata	Herb	Cardiovascular
Gundelia tournetortti L	Seeds	Cardiovascular
Inula cappa DC	Shrub	cardiovascular, Diabetes mellitus
Launaea intybacea	Whole plant	Cardiovascular
Sonchus wightianus	Root	Cardiovascular
Achillea asiatica Serg	Whole plant	Diabetes mellitus
Achyrocline alata (Kunth) DC	Whole plant	Diabetes mellitus
Artemisia princeps Pamp.	Whole plant	Diabetes mellitus
Artemisia capillaris Thunb.	Whole plant	Diabetes mellitus
Taraxacum platycarpum Dahlst.	Whole plant	Diabetes mellitus
Tithonia diversifolia (Hemsl.) A.Graya	Flower	Diabetes mellitus
Vernonia amygdalina Delilea	Leaf	Diabetes mellitus

Photos of field study during dissertation

Discussing Compositae family with Botanist at Yogivemana University

Observing Compositae Herbarium

ABBRIVATIONS

- HPI – Homoeopathic Pharmacopoiea of India
- HPUS- Homoeopathic Pharmacopoiea of United States
- EHP- Encyclopedia of Homoeopathic Pharmacopoiea
- BHP- British Homoeopathic Pharmacopoiea
- AHP- American Homoeopathic Pharmacopoiea
- BATT.HP- Battacharya Homoeopathic Pharmacopoiea
- Q- Mother tincture
- v/v- Volume/Volume
- g- Grams
- nm- Nano meter
- w/v- Weight/ Volume
- TLC- Thin layer chromatography
- UV- Ultra violet
- CCRH- Central council for research in Homoeopathy
- STL- Sesquiterpene lactones
- DPPH- 1,1-diphenyl-2-picryl-hydrazyl
- HPLC-DAD-MS- High performance liquid chromatography- LC diode-array detector - mass spectrometry
- MTS ASSAY- colorimetric method to measure cell metabolic activity and proliferation
- GABA- Gamma aminobutyric acid
- EPMG EXTRACT- Ethanol extract of leaves of M. glomerata
- Sp.-Species

- MDAMB-231- M D Anderson - Metastatic Breast - 231
- MTT ASSAY- colorimetric assay for assessing cell metabolic activity
- GC-FID- Gas chromatography -Flame ionization detection
- GC-MS- Gas chromatography–mass spectrometry
- RA- Rheumatoid arthritis
- PGE- Prostaglandin E
- TNF- Tumor necrosis facto
- IFN- Interferon
- C.P- Coarse powder
- NF-KB- Nuclear factor kappa-light-chain-enhancer of activated B cells
- M.M- Moist magma
- D.A- Dispensing alcohol
- S.A- Strong alcohol
- P.W- Purified water