



Synergic Active Principles of Medicinal Plants in Complex Remedy Makes Electro-Homeopathy — A Novel Medical System

G. S. Taki^{1,3*}, Indrajit Sarkar², Rakhi Saha² and A. K. Mallick^{2,3}

¹Institute of Engineering and Management, Kolkata – 700091, West Bengal, India; gstaki@gmail.com ²Rajlaxmi Electro-Homeopathic Medical College and Hospital, Kolkata – 700131, West Bengal, India ³Central Council of Electro-Homeopathic System of Medicine, Kolkata – 711101, West Bengal, India

Abstract

The traditional herbal remedy utilises the active principles of medicinal plants, either in singular or combination. Electro-homoeopathy uses the favourable component of the active principle or medicinal properties, removing the toxic part, and using various scientific processes to prepare the remedies. To achieve faster recovery of the affected organ, Count Cesar Mattei invented a Complex herbal remedy by the Synergic mixing of the Spagyric essence of selected plants. Mattei also mentioned that a suitable complex remedy could fully cover and control the complex remedy and the affected organ. In such a complex, the toxin is eliminated by thermal, various energy-driven scientific processes, enhancing medicinal properties. A table has been designed for 114 plants to correlate the active principles/medicinal properties of the parts used in various Electro-Homeopathy remedies. The uses of the complex remedy and the remarkable clinical results obtained by the inventor and his numerous followers have been referred to in their books and reports. The basic steps of the selection of remedies in the context of affected organs and diseases are presented in the tables. The underlying Alchemical Spagyric preparation method *Cohobation* has been precisely addressed here.

Keywords: Active Principle, Blood and Lymph, Complex Remedy, Cover and Control, T and B Lymphocytes

1. Introduction

In 1865, Electro-Homeopathy (EH) was invented by an Italian Herbalist, Count Cesar Mattei. Based on his unique physiological axiom "Life is in Blood and Lymph" 1-6, Mattei invented a complex herbal remedy prepared by the combination of multiple useful parts of selected plants, using a special alchemical scientific process termed *Cohobation*. Such a process can extract the useful energy available from the living plant, eliminating harmful components. Electro homoeopathic remedies have some useful components like methyl-cysteine, flavonoids, tannins, etc. and also may have some toxic components like coniine, aconitine, urushiol, etc. which have adverse effects on the nervous system, respiratory system and skin.

Various selected plant extracts are combined to form remedies more effective and toxin-free. Such remedy causes faster successful recovery of complex human systems. EH complex remedy consisting of useful medicinal properties or the favourable active principles of the constituting plants. This complex remedy is effectively devoid of all the harmful components and the only useful portion is remaining. Such a remedy can cover and control the affected parts and tissue of the organs^{1,2}.

Before Mattei's invention, the medical systems had been continued since ancient times, using remedies made from the active principle of plants. There, the plants have been used in singular or combination as bulk materials. Sir Samuel Hahnemann invented Homoeopathy Medical Science using the Essences

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^{*}Author for correspondence

of the active principle of singular plant. Substantial research works have been carried out in these directions⁷⁻²⁴.

Electro-Homoeopathy remedy works to purify lymph and blood flowing through numerous capillaries and vessels, distributed all over the human body. Count Mattei treated a large number of European populations by applying his fast-acting complex medicines. The recovery of the immune system takes place very quickly in its original condition. As the EH treatment method follows the common physiological axiom to treat any disease, EH can be considered a comprehensive medical Science.

Mattei, perhaps, had been impressed by the contemporary invention of Charles Darwin's Law of Natural Selection. The origin of Darwin's Law is based on the Physiological law of nature, over which Mattei's invention of the basic foundation of the complex herbal remedy stands. Darwin's followers extensively worked in that direction. Some of the references are listed here for further information²⁵⁻³⁰.

2. Materials and Methods

2.1 Electro-Homeopathy Remedy

EH remedies are Synergic complex of selected Spagyric Essences. Remedies are harmless and free from any side effects. Spagyrics are extracted from 114 herbal

medicinal plants possessing their active principles and medicinal properties. The names of the plants along with their active principles/medicinal properties and uses of the plant parts in the preparation of various remedies have been presented in Table 1. To enrich the useful components, the toxic parts are removed and the useful parts are collected for processing, during the most favourable season of the year. Spagyric Essences are prepared by a scientific alchemical process called Cohobation. During this process, the plant materials are exposed to thermal and various natural energy-driven processes. The exposure of these energies to the process material partially eliminates and converts the toxic elements into their non-toxic and useful counterpart. We have carried out some tests in UGC-DAE CSR. Kolkata and results are communicated elsewhere in the Scopus Index IEEE conference series, IEMENTECH 2023. Now, the products so obtained are mixed to get the resultant material full of energy available in living plants and partially devoid of harmful materials. The process of fragmentation and unification is called Cohobation. It has been discussed in the subsequent section.

2.2 Spagyric Essence Preparation Method

A Special Spagyric Essence Preparation Method is termed as *Cohobation*. It contains progressive distillation combined with fermentation, multiple filtration, roasting and incineration then reunification

Table 1. Plant names with active principles and their use in EH remedies

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names
1	Achillea millefolium	Herb	Whole plant without roots	Sesquiterpene lactones (including achillin, achillicin, caryophyllene oxide), flavonoids (apigenin, luteolin, and kaempferol), artemisia ketone, chamazulene, borneol, camphor, linalyl acetate and 1,8-cineole, tannins.	A2, WE.
2	Aconitum napellus	Herb	Whole plants	Aconitine, mesaconitine, hypaconitine, pseudoaconitine.	F1, RE, P4.
3	Adiantum capillus-veneris	Herb	Whole plants	Flavonoids (kaempferol, quercetin, luteolin, and their glycosides), triter-penoids, β-sitosterol and lupeol, phenolic compounds, phenylpropanoids, carbohydrates, carotenoids, alicyclics.	P1, P2, P3, P4.
4	Aesculus hippocastanum	Tree	Bark, pericap, ripen fresh hulled nut	Aescin (triterpene saponins), flavonoids (quercetin, kaempferol, and rutin), terpene (ursolic acid and oleanolic acid), coumarins, tannin.	S10, A2, F1, F2.
5	Agaricus muscarius	Fungi	Stipes and pileus	Muscarine, ibotenic acid, muscimol.	WE.

Table 1. Continued...

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names
6	Ailanthus glandulosa	Tree	Fresh shoot, leaves, blossoms and young bark	Quassinoids, alkaloids, phenolic compounds, flavonoids (quercetin and kaempferol derivatives.), saponin.	C13.
7	Allium cepa	Herb	Matured bulb	Allicin, quercetin, fisetin, other sulphurous compounds, organosulfur compounds (diallyl disulphide and diallyl trisulphide), quercetin derivatives.	P1, P2, P3, P4, YE.
8	Allium sativum	Herb	Matured bulb	Allicin, alliin, diallyl sulfide, diallyl disulfide, diallyl trisulfide, quercetin, apigenin, kaempferol, ajoene and S-allyl-cysteine.	Ver1, Ver2.
9	Aloe capensis	Herb	Gum resin, juice of leave	Anthraquinones, anthraquinones, polysaccharides, flavonoids, sterols, vitamins, minerals.	SLASS.
10	Althaea officinalis	Shrub	Roots	Pectins, starch, mono- and di-saccharide, saccharose, mucilage, flavonoids (Hypolaetin-8-glucoside, isoquercitrin, kaempferol, caffeic, pcoumaric acid)	Ven1, GE.
11	Anthemis nobilis	Shrub	Top of plants	Chamazulene, bisabolol. apegenin, flavonoids (luteolin, quercetin, and their glycosides).	WE.
12	Arnica montana	Herb	Root, flower, leaves	Sesquiterpene lactones, flavonoids, terpenoids, phenolic acids, volatile compounds, essential oils.	A1, A3, P4, C6, WE, APP.
13	Artemisia abrotanum	Shrub	Flowers	1,8-cineole (eucalyptol), camphor, thujone, fenchene, sabinene, caryophyllene, humulene.	АЗ.
14	Artemisia cina	Shrub	Flowers	Santonin, thujone, betaine, choline, tannins, pigments, terpenoids, essential oil (1,8-cineole).	Ver2.
15	Atropa belladonna	Herb	Roots, leave, stem, flowers	Atropine, hyoscyamine, Triterpenoid saponins, flavonoids, steroidal alkaloids (solanidine).	S12, C13.
16	Avena sativa	Herb	Seeds, leave	Avenanthramides, beta-glucans, beta-carotene, polyphenols, chlorophyll, flavonoids, malic, citric, malonic, aconitic, oxalic acid, alkaloids.	A1, A2, A3, WE.
17	Berberis vulgaris	Shrub	Small branch of the root, Large fibrous root, leave and fruits	Alkaloid berberine, berberine, resin, pectin, malic acid, tartaric acid, tannin.	S5, S10, F1, F2.
18	Betula alba	Tree	Branches, bark, leaves	Triterpenoids, diarylheptanoids, phenylbutanoids, lignans, phenolics, flavonoids, saponins, polymeric proanthocyanidins.	Ven1.
19	Cannabis sativa	Shrub	Flowering top	Psychoactive delta-9-tetrahydrocannabinol, terpenes, oleo resin, cannabinol.	Ven1.
20	Capsella bursa pastoris	Herb	Whole plant	Quercetin, tricin, diosmetin, flavonoids, kaempferol, luteolin, hesperitin and derivated glycosides, phenolics acid.	A1, BE.
21	Carduus benedictus	Herb	Whole plant	Sesquiterpene lactone glycosides, cnicin, polyacetylen, absinthin, salonitenolide	C10.
22	Caulophyllum thalictroides	Herb	Whole plant with roots.	Saponin, alkaloids, N-methylcytisine, N-formylcytisine, N-acetylcytisine, triterpenes, flavonoids, quercetin, kaempferol, isoquercitrin, hyperoside, glycosides	C1.
23	Cetraria islandica	Lichen	Whole plant	Potassium, lichen acids, polysaccharides, cetraric acid, phenolic compounds, sodium, magnesium, gum, mucilage, and fumarate.	S10, F1, F2.

Table 1. Continued...

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names
24	Chelidonium majus	Herb	Whole plant	Alkaloids, chelidonine, chelerythrine, chelidocystatin, coptisine, sanguinarine, berberine, sparteine, flavonoids, coumarin, and caffeic acid.	C1O, YE.
25	Chenopodium anthelminticum	Herb	Dried whole plant, seed, flowering top essential oil, aerial part	Ascaridole, saponin, mucilage, flavonoids, essential oils.	Ver1, Ver2
26	Cimicifuga racemosa	Herb	Root	Triterpene glycosides, phenolic compounds, triterpenoids, isoflavones, ascorbic acid, betacarotene, butyric acid, calcium, and chromium.	WE.
27	Cinchona calisaya	Tree	Bark of crown	Quinine alkaloids-quinidine, cinchonine alkaloids, flavonoids, tannins.	S10, F1, F2, BE.
28	Cinchona succirubra	Tree	Bark	Cinchonine, quinidine, cinchonine, cinchonidine, quinolone, alkaloids, polyphenolic compounds, quercetin, kaempferol derivatives, quinine alkaloids (dihydroquinine and hydroquinidine).	S10, F1, F2.
29	Clematis erecta	Shrub	Leaves, stem, Roots	Quaternary isoquinoline alkaloids, flavonoids, triterpenoid (lupeol and β-sitosterol).	Ven1.
30	Cochlearia officinallis	Herb	Roots	Glucosinolates, glycosides, minerals, salts, tannins, ascorbic acid.	\$1, \$2, \$3, \$5, \$6, \$10, \$11, \$12.
31	Condurango marsdenia	Herb	Dried branch and bark	Quercetin, quinovic acid glycosides, triterpenes, caffeic acid, cinnamic acid, coumarins, rutosides, saponarin.	C15.
32	Conium maculatum	Shrub	Leaves, flowers, stems	Coniine, gamma-coniceine, N-methylconiine, pseudoconhydrine, piperidine, methyl conine, pectine resin, gum, caffeic acid, acetic acid.	C1, C2, C3, C4, C5, C6, C10, C13, C15 C17, GE.
33	Daphne mezereum	Shrub	Bark	Glycoside, daphnin, mezerein, Coumarins	C3.
34	Dictamnus albus	Herb	Blows root	Limonene, dictamnine, coumarins, 5-methoxypsoralen and 8-methoxypsoralen, dictagymnin, feniculin, methylchavicol	Ver1, Ver2.
35	Drosera rotundifolia	Herb	Whole fresh plant	Naphthoquinones, flavonoids including kaempferol, quercetin, and myricetin, phenolic acids such as caffeic acid and chlorogenic acid, essential oils, alpha-pinene, beta-pinene, limonene, various sesquiterpenes.	Р3.
36	Echinacea angustifolia	Herb	Dried Root	Alkylamides caffeic acid, polysaccharides, glycoproteins.	L1.
37	Equisetum arvense	Shrub	Stem	Alkaloids, flavonoids, phenol, phytosterols, saponins, sterols, silicic acid, tannin, triterpenoids, volatile oils, salisylic acid, ferrous oxide etc.	C2, P2.
38	Ervum lens	Herb	Dried and ripe seed	Clothianidin, thiamethoxam, imidacloprid.	BE, GE.
39	Erythraea centaurium	Herb	Whole plant	Secoiridoids, xanthones, phenolic compound.	S10, L1, F1, F2.
40	Eucalyptus globulus	Tree	Mature leaves without petiole	Eucalyptol (Cineole), pinene (α -Pinene and β -Pinene), Terpinen-4-ol.	P1, P2, P3, P4, Ven1.
41	Euonymus europaeus	Tree	Fruit, seed, wood	Vobrutin, evonine, evonoside, quercetin, kaempferol, rutin, coumarin, triterpene, n-hexane, dichloromethane and methanol.	APP.

Table 1 Continued...

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names	
42	Euphorbium officinale	Herb	Confirmed milk (gum resin)	Resin (Resiniferatoxin), euphorbone (C20H36O or C15H24O), volatile oil.	Ver1.	
43	Euphrasia officinalis	Herb	Whole plants	Iridoid glycosides including aucubin and catalpol; flavonoids such as luteolin and apigenin, phenolic acids including rosmarinic acid and caffeic acid.	S12.	
44	Fucus vesiculosus	Algae	Dried body of plant	Fucoidan (complex sulfated polysaccharide), Fucoxanthin (carotenoid pigment), and alginates.	L1.	
45	Galeopsis ochroleuca	Herb	Flowering plant without root	Iridoid glycosides (aucubin and catalpol), flavonoids (apigenin, luteolin and quercetin) and phenolic acids (caffeic acid and rosmarinic acid).	P2.	
46	Genista scoparia	Herb	Fresh plant without root	Genistin, genistein, sparteine, quercetin, kaempferol, tannins.	WE.	
47	Gentiana leutia	Shrub	Root	Flavanol glycosides, flavones, glycosides, oleanoic acid, a-ursolic, β-ursolic acid, secoiridoids, gentiopicroside, swertiamarin, amarogentin, xanthones, flavonoids, quercetin, luteolin, apigenin, limonene and α-pinene.	SLASS.	
48	Glechoma hederacea	Herb	Whole plant	Flavonoids (rutin, quercetin, kaempferol), terpenoids, phenolic compounds (rosmarinic acid, chlorogenic acid), triterpenes (ursolic acid and oleanolic acid).	P2.	
49	Guaiacum officinale	Tree	Gum resin of wood and bark	Guaiacol, guaiaretic acid, quinones, resin.	WE.	
50	Hamamelis virginiana	Shrub	Branches and root	Tannins (gallotannins, ellagitannins), flavonoids (kaempferol, quercetin), essential oils (eugenol, safrole, and chavicol), proanthocyanidins.	A2, GE.	
51	Humulus lupulus	Herb	Ripe seed, female flowers, young shoots	Alpha acids (humulone, cohumulone, and adhumulone), flavonoids (xanthohumol, isoxanthohumol), essential oils (myrcene, humulene, caryophyllene, and farnesene).	L1.	
52	Hydrastis canadensis	Herb	Root	Berberine, hydrastine, canadine, alkaloids (canadaline, palmatine, and hydrastinine)	S1, S2, S3, S5, S6, S10, S11, S12, A1, A2, A3, P3.	
53	Hyoscyamus niger	Shrub	Fresh leave, seed, flower top, branches	Tropane alkaloids (hyoscyamine, scopolamine, atropine), scopoletin, lignans (hyoscyamine and 6-hydroxyhyoscyamine), caffeic acid, chlorogenic acid, flavonoids (apigenin, luteolin).	Р3.	
54	Imperatoria ostruthium	Herb	Root	Coumarins (oxypeucedanin, ostruthol, imperatorin, osthole, isoimperatorin, ostruthin).	Ver1.	
55	Ledum palustre	Shrub	Whole plant and dried leave	Lador, myrcene, Cis- and trans-piceid, flavonoids (quercetin, kaempferol).	C6.	
56	Lobelia inflata	Herb	Whole dried plant	Lobelin, lobelamine, lobelanidine, lobelanine, quercetin, scopoletin.	S11.	
57	Lycopodium clavatum	Herb	Dried ripe spores	Lycopodine, huperzine, lycopene.	S2.	
58	Malva sylvestris	Herb	Whole plant without roots	Mucilage, flavonoids (kaempferol, quercetin), anthocyanins (cyanidin and delphinidin), triterpenoids (ursolic acid, oleanolic acid), phenolic compounds (chlorogenic acid, caffeic acid).	A1, A3.	
59	Matricaria chamomilla	Herb	Whole plants	Apigenin, bisabolol, chamazulene, matricin, flavonoids (luteolin, quercetin, patuletin).	S1, S2, S3, S5, S6, S11, S12.	

Table 1. Continued...

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names
60	Melissa officinalis	Herb	Blows sheets	Rosmarinic acid, flavonoids (luteolin, apigenin, and quercetin), triterpenes (ursolic acid, oleanolic acid), volatile oils (citral, citronellal, geranial, and neral), polyphenols.	S11.
61	Menyanthes trifoliate	Herb	Whole plants	Flavonoids (quercetin, kaempferol), triterpenoids, glycosides.	L1, WE.
62	Myrtus communis	Shrub	Leave and fresh flowering branch	Essential oils (myrtenol, α-pinene, 1,8-cineole, limonene, and linalool), tannins, flavonoids (myricetin, quercetin, and kaempferol), organic acids (citric acid and malic acid), polyphenolic compounds (ellagitannins and anthocyanins).	Ven1.
63	Nasturtium officinale	Herb	Whole plant without roots	Glucosinolates (gluconasturtiin and phenylethyl glucosinolate), flavonoids (quercetin, kaempferol and apigenin), phenolic acids (caffeic acid and ferulic acid), Vitamin c, carotenoids, minerals (calcium, iron, magnesium, potassium).	S1, S2, S3, S5, S6, S10, S11, S12.
64	Oxalis acetosella	Herb	Whole plants without roots	Oxalic acid, ascorbic acid, flavonoids (quercetin, kaempferol), anthocyanins, tannins, citric acid, malic acid, and tartaric acid.	L1.
65	Petroselinum sativum	Herb	Whole plants with root.	Transocimene, limonene, linalool oxide, caryophyllene oxide, apiol, elemicin.	C2, WE.
66	Phellandrium aquaticum	Herb	Dried and ripe fruit	Essential Oils (carvone, limonene, phellandrene), coumarins (bergapten, xanthotoxin, imperatorin), flavonoids (apigenin, luteolin), alkaloids (phellandrine, phellandridine).	P1, P2, P3, P4.
67	Phytolacca decandra	Herb	Roots	Saponins (phytolaccagenin, phytolaccasaponin D, phytolaccasaponin E), lectins, polyphenols (rutin,quercetin, kaempferol), phytolaccoside B.	C5, GE.
68	Pimpinella saxifraga	Herb	Roots	Coumarins (umbelliferone, herniarin, scopoletin), flavonoids (quercetin, kaempferol, rutin), essential Oils (α-Pinene, β-Pinene, limonene), triterpenes (α-Amyrin, β-Amyrin).	C1, C2, C3, C4, C5, C6, C10, C13, C15, C17.
69	Pinus maritima	Tree	Gum resin	Procyanidin dimers (catechin, epicatechin), procyanidin oligomers, phenolic acids (ferulic acids, caffeic acid, gallic acid), bioflavonoids (taxifolin, catechin), organic acids (malic acid, tartaric acid).	BE.
70	Pinus nigra	Tree	Gum form stem	Essential Oils (α -Pinene, β -Pinene, limonene, camphene), polyphenols (catechins, procyanidins, flavonoids), resin and resin acids (abietic acid, pimaric acid), lignans (lariciresinol, secoisolariciresinol).	BE, APP.
71	Podophyllum peltatum	Herb	Roots	Podophyllotoxin (deoxy podophyllotoxin), flavonoids (quercetin, kaempferol), Lignans (Podofilox, β-eltatin).	C10, YE.
72	Polygala amara	Herb	Flowering above ground part	Saponins (polygalasaponins, polygalacic acid), alkaloids (polygaline, polygalamine), and flavonoids (rutin, kaempferol).	P1, P2, P3, P4.
73	Populus alba	Tree	Closed buds, blows branch crust and blows sheet buds.	Salicin and salicylates (salicin, salicylic acid), flavonoids (quercetin, kaempferol, rutin), phenolic glycosides (populoside, tremulacin), terpenes, organic acids (malic acid).	Ven1, GE.

Table 1. Continued...

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names
74	Populus tremuloides	Tree	Bark	Salicin and salicylates (salicin, salicylic acid), flavonoids (quercetin, kaempferol), and phenolic glycosides (populoside, tremulacin).	C17, Ven1, GE.
75	Pulmonaria officinalis	Herb	Whole lichen	Alkaloids (symphytine, pulmonarine), tannins (ellagitannins, hydrolyzable tannins), and flavonoids (quercetin, kaempferol).	L1.
76	Pulsatilla vulgaris	Herb	Whole plants	Isoquinoline alkaloids (anemonine, ranunculin), sesquiterpene lactones (pulsatillol, anemoninolides), and flavonoids (quercetin, kaempferol).	А3.
77	Rheumofficinale /Rheum palmatum	Herb	Roots and ungrounded stem	Anthraquinones (rhein, emodin, aloe-emodin), tannins (gallic acid, ellagic acid), and phenolic compounds (catechins, quercetin).	S3.
78	Rhododendron ferrugineum	Shrub	Leaves and blows sheets, branch points	Anthocyanins (cyanidin, delphinidin), polyphenols (gallic acid, catechins), terpenoids (diterpenes, triterpenes).	RE.
79	Rhus aromatica	Tree	Crust dried roots	Triterpenoids (betulinic acid, ursolic acid), flavonoids (quercetin, kaempferol).	C17.
80	Rhus toxicodendron	Herb	Leaves (Recent impulses)	Urushiol (pentadecylcatechols), flavonoids (quercetin, kaempferol), triterpenoids (betulinic acid, ursolic acid).	C1, C2, C3, C4, C5, C6, C10, C13, C15, C17.
81	Rosa canina	Shrub	Ripe fruits with seed	Vitamin C, flavonoids (quercetin, kaempferol, rutin), carotenoids (lycopene, carotene), organic acid (citric acid, malic acid).	Ver1, RE.
82	Rosmarinus officinalis	Shrub	Dried sheets	Essential oi (1,8-cineole, pinene, camphor, rosmarinic acid), flavonoids (apigenin, luteolin, diosmetin), diterpenes (carnosic acid, rosmanol, rosmaridiphenol).	RE.
83	Ruta graveolens	Herb	Whole plant without root	Essential oils (2-undecanone, limonene, eugenol), alkaloids (rutamarine, arborinine), coumarins (bergapten, isobergapten, rutamarin).	WE, YE, Ver1, Ver2.
84	Salix alba	Tree	Bark	Salicylates (salicin, salicylic acid), flavonoids (quercetin, kaempferol, rutin), phenolic glycosides (salicortin, tremulacin), tannins (catechins, procyanides) and components (borneol, cineole, camphor, and thujone).	S10, F1, F2.
85	Salvia sclarea	Herb	Blow sheet	Essential oil (linalyl acetate, linalool, germacrene-d, caryophyllene), terpenoids (humulene, sclareol), phenolic compounds (rosmarinic acid, caffeic acid, salvianolic acid).	BE.
86	Salvia officinalis	Herb	Above ground parts of flowering plant	Essential oils (thujone, 1,8-cineole, camphor), flavonoids (apigenin, luteolin, rosmarinic acids), carnosic acid.	BE.
87	Sambucus nigra	Tree	Leaves, flowers, fruit	Anthocyanins (cyanidin-3-glucoside, cyanidin-3-sambubioside), Flavonoids (quercetin, kaempferol, rutin), organic acids (malic acid, citric acid, tartaric acid).	S10, F1, F2, GE, YE.
88	Sanguinaria canadensis	Herb	Roots	Benzylisoquinoline alkaloids (sanguinarine, chelerythrine, protopine), isoquinoline alkaloids (sanguidimarine, sanguilutine), polyphenols (caffeic acid, gallic acid, quercetin).	A1, A2, A3, WE.
89	Sanguisorba officinalis	Herb	Whole plants	Tannisn (gallic acid, ellagic acid, catechin), flavonoids (quercetin, kaempferol, rutin), organic acids (malic acid, citric acid, tartaric acid).	WE.

Table 1. Continued...

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names
90	Scolopendrium vulgaris	Shrub	Whole plants	Phloroglucinols (Scolopendrin A, scolopendrin B), flavonoids (luteolin, quercetin).	F2.
91	Scrophularia nodosa	Shrub	Whole plants	Iridoid glycosides (catalpole, harpagoside, aucubin), phenylethanoid glycosides (verbascoside, martynoside), flavonoids (quercetin, luteolin, apigenin).	S1, S2, S3, S5, S6, S10, S11, S12, APP.
92	Simarouba amara	Tree	Dried Bark	Quassinoids (simaroubolide, amarolide, amaroswerin), flavonoids (quercetin, kaempferol, rutin), Sterols (sitosterol, stigmasterol).	L1.
93	Smilax medica	Herb	Roots	Saponins (sarsasaponin, smilasaponin, sarsasapogenin), flavonoids (quercetin, kaempferol, rutin), phenolic compounds (ferulic acid, caffeic acid, scopoletin).	S1, S2, S3, S5, S6, S10, S11, S12, APP.
94	Solanum dulcamara	Shrub	Leave and Young branch	Alkaloids (solanine, solasodine, dulcamarine), glycosides (dulcoside A, dulcoside B), flavonoids (quercetin, kaempferol, rutin).	Ven1.
95	Solidago virgaurea	Herb	Flower	Flavonoids (quercetin, kaempferol, rutin), phenolic acids (chlorogenic acid,caffeic acid), terpenoids (germacrene D, beta caryephyllene).	<i>S6.</i>
96	Spigelia anthelmia	Herb	Whole plant without root	Spigeline, anthelmintic flavonoids, coumarins (scopoletin).	Ver2.
97	Steffensia elongata	Shrub	Dried leave	Strychnine, brucine, myristicin, 1,8-cineole and β-ocimene.	Ven1.
98	Strychnos nux vomica	Tree	Ripe seeds	Strychnine, brucine.	S1, C15.
99	Symphytum officinale	Herb	Roots and leaves	Allantoin, pyrrolizidine alkaloids (symphytine, echimidine), tannins, mucilage.	C4.
100	Tanacetum vulgare	Herb	Flowering plant	Thujone, sesquiterpene lactones (parthenolide, santamarine), flavonoids (quercetin, luteolin, apigenin), coumarines (scopoletin), essential oils (camphor, borneol).	Ver2.
101	Taraxacum officinale/ Leontodon taraxacum	Herb	Whole plant without root	Taraxasterol, flavonoids (luteolin, apigenin), sesquiterpine lactones (taraxacine, taraxinic acid), phenolic acids (chlorogenic acids, caffeic acids), polysaccharides, triperpines.	WE, APP.
102	Taxus baccata	Tree	Leave	Taxanes, baccatins, taxoids (taxinine, taxezopidines, cephalomannins), flavonoids, procyanidines.	WE
103	Teucrium scorodonia	Herb	Fresh plant	Diterpenoids (teucrin A, teucrin B), flavonoids, triterpenes, phenolic compounds (rosmarinic acid, caffeic acid), essential oil (camphor, borneol).	P2.
104	Thuja occidentalis	Tree	Leafy branches	Thujone, thujaplicins, flavonoids, tannins, essential oil (pinene, camphene, limonene).	Ven1.
105	Thymus serpyllum	Herb	Whole plant without root	Thymol, carvacrol, flavonoids (epigenin, luteolin), rosmarinic acid, triterpenes (ursolic acid, oleanolic acid).	Ver1.
106	Tilia europaea	Tree	The fresh blossoms freed from the peduncle	Flavonoids, volatile compounds (linalool, benzaldehyde, limonene), tannins, phenolic acids.	Ven1.
107	Tussilago farfara	Herb	Flower	Pyrrolizidine alkaloids (senkirkine, senecionine, seneciphylline), flavonoids, mucilage.	S1, S2, S3, S5, S6, S10, S11.

Table 1. Continued...

SI. No.	Name of plant	Plant types	Parts used in EH remedy	Active Principles/Active medicinal ingredients	Use in EH Remedies: Names
108	Uragoga ipecacuanha	Herb	Root	Emetine, cephaeline, psychotrine.	P1, P2, P3, P4.
109	Veronica officinalis	Herb	Whole plant	Iridoid glycosides (veronicoside, catalpol, and aucubin), flavonoids (apigenin, luteolin, and kaempferol), triterpenoids (ursolic acid and oleanolic acid), phenolic compounds (caffeic acid and rosmarinic acid).	S1, S2, S3, S5, S6, S10, S11, Ven1.
110	Viburnum opulus	Shrub	Bark	Viburnine, flavonoids (quercetin, isoquercitrin, hyperoside), caumarins (scopoletin).	Ven1.
111	Vinca minor	Herb	Whole plant with root and fruit	Vincamine, vincristine, vinblastine.	Ven1, APP.
112	Vincetoxicum officinale	Herb	Root	Vincetoxin, vincetoxicin, triterpinoid saponins, ferulic acid, caffeic acid, vincamin.	C1, C2, C3, C4, C5, C6, C10, C13, C15, C17.
113	Viscum album	Shrub	Mature branches with fruits	Viscotoxins, mistletoe lectins, viscumins, flavonoids (quercetin, kaempferol).	WE.
114	Vitis vinifera	Vine	Fresh leave	Polyphenols, quercetin, catechins, resveratrol.	RE, APP.

and Digestion. According to Count Mattei, the EH remedies are the complex mixtures of Spagyric essences of selected parts of several useful plants containing various active principles, Count Mattei arrived at an accurate alchemical medicine preparation method *Cohobation*, which is a holistic alchemical process where instead of direct high-temperature boiling of plant parts the steam distillation method is performed that does not use the high temperature thus preserving the vital energy of the plants.

The preparation of Spagyrics always follows the alchemical philosophical principles and terminology: *Sulphur, Mercury* and *Salt.* In the Alchemy process, the useful oil of plants separated by a special distillation process is termed *Sulphur.* The sketch of the distillation apparatus is shown in Figure 1.

The total materials, specially fermented at 27°C temperature, yield the spirit-like liquid, termed *Mercury*. After filtration of the spirit seven times, the residue of the plant body is roasted and incinerated in an oven at 600°C. A grey color ash, such produced, converted to a water-soluble hygroscopic *salt*.

Cohobation is the reunification of the *spirit* and *salt* into volatile oil recovered from the plant body for the restoration of energy of the plant. Then the composite amount is allowed to digest at 30°C in an incubator for

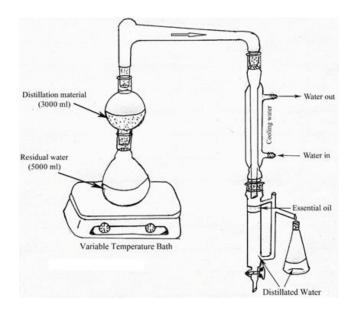


Figure 1. Steam distillation apparatus.

a period of one week. Slight shaking of the container is essential in the Digestion process. In the final decantation process, spagyric essence is decanted from the un-dissolved *salts*. The decanted spagyric essence appears to be a yellow-coloured liquid with a strong smell of the original plants. This high-quality non-toxic essence is mixed at finite compositions and proportions to prepare the complex remedy for EH treatment. The

spagyric essences extracted with the help of scientific processes, preserve the vital energy present in the living plants. This is another vital reason to cause quick recovery of a patient by EH treatment³¹⁻³⁹.

3. Results and Discussions

3.1 EH Complex Remedies in Practice

By mixing the desired Spagyric essences, the harmful components are converted into useful and safe remedies. Mattei CC discovered 38 complex original remedies. Mattei's German EH followers extended those up to 60 complex remedies by mixing Mattei's original remedies in fixed proportion^{40,41}. Remedies are classified into eight groups, e.g., *Scrofoloso, Angioitico, Canceroso, Febrifugo, Linfatico, Pettorale, Vermifugo, Venereo* along with five *liquid Electricity* and *AquaPerlaPelle*⁴²⁻⁴⁷ (Table 2).

3.2 A Basic Guideline for the Selection of EH Complex Remedies

The guidance of treatment with multiple remedies by C. C. Mattei was largely used and practised by Dr. A. J. L. Gliddon, Prof. Theodore Krauss, Dr. N. L. Sinha, Dr. D. Gangopadhyay and others¹⁻⁶, 42-47.

A brief guideline is given in Table 3 for selecting complex remedies for oral and therapeutic uses.

3.3 Treatment Philosophy and Mattei's Theory of Complex Remedy

It has been studied that blood possesses circulatory motion and lymph one directional motion in their respective vessels. It is essential now to understand the treatment physiology. Based on Mattei's unique physiological axiom "Life is in Blood and Lymph" l-6, he invented complex herbal remedies in EH. It stands

Table 2. EH Remedies and their effective organs

Groups of EH Remedy	Effective for organ/system	No. of remedies in the Group
Scrofoloso	Remedies of this group purify lymph to enhance lymphatic circulation related to the exterior and interior assimilation i.e., Gastric intestinal Canal with Glandular appendage along with the related organs and tissues. It assists the metabolism process. Depending upon the medicinal properties of constitutional plants and herbs, <i>S1-S12</i> remedies of <i>Scrofoloso</i> Group are extremely useful for various organs and tissues related to Gastric intestinal systems. By showing the universal remedial effectiveness during a pandemic in Japan, <i>S10</i> is called in Japan as <i>Giappone</i> ^{3,45} .	Total 12 <i>Scrofoloso</i> remedies: <i>S1</i> , <i>S2</i> , <i>S3</i> , <i>S5</i> , <i>S6</i> , <i>S10</i> , <i>S11</i> and <i>S12</i> . 8 basic remedies and 4 mixed remaining.
Angiotico	Angioticos act on the heart and other components of the circulatory system including blood, blood vessels, arteries, veins and capillaries. Also indirectly effective in defects in the lymphatic system. It purifies blood and increases blood flow.	
Canceroso	Cancerosos belong to the extended category of the Scrofoloso group. The basic difference includes the effectiveness of Canceroso remedies starting when the action of Scrofoloso remedies becomes slow due to chronic degeneration of cells. Canceroso remedy is used in cases which resist the action of the Scrofoloso group when any organ or organized tissue undergoes degeneration. Cancerosos are called the tissue remedy for cellular construction.	
Linfatico	It acts on lymph, lymph glands and blood. Its action starts at the moment the food turns into living lymph. It influences the white corpuscles while the <i>Scrofolosos</i> act more immediately on the organs that produce and develop the same. The influence of this remedy extends to the blood and the course of blood ^{42,45,46} .	This group has only two medicines- <i>Linfatico</i> 1 and <i>Linfatico</i> 2.
Pettorale	The remedies of this group work on the respiratory system, e.g., trachea, bronchi, respiratory bronchioles alveolar sac and ENT system.	P1-P4 are fundamental and P5-P9 are proportionally mixed remedies.
Febrifugo	This group works on the nervous system and also removes weakness. It enhances the efficiency of other remedies. All types of fevers are cured by this group.	This group contains two remedies – <i>F1 and F2</i> .

Table 2. Continued....

Groups of EH Remedy	Effective for organ/system	No. of remedies in the Group
Vermifugo	Vermifugo cures various worms in the intestines and other infected organs. It is used for mucous membranes and anti-parasitic medicine in combination with other medicines.	Two remedies <i>Ver 1</i> and <i>Ver 2</i> act as antigerm and parasitic infections.
Venereo	Remedy acts as anti-venereal and anti-viral diseases. It acts efficiently for genetic diseases.	This group has a single remedy (<i>Ven 1</i>).
Liquid Electricity	Red Electricity: Increases blood circulation, and acts as an arterial and nerve stimulant. It increases the vitality of the body. Blue Electricity: Acts on the arterial and venous systems. And acts as a stimulant in the circulatory system. In diluted conditions, blue electricity calms the overstimulated organs. Green Electricity: It is anti-cancerous, and acts on the cellular level. Cures chronic diseases and arthritic conditions. GE works on sensory nerves, cell membranes, nucleus, glands and skin. Prevents cell damage and unwanted cell growth. Yellow Electricity: Relaxes muscular, nervous tension and organic function. Working as anti-germ on excretory organs, liver, kidney, sensory nerve and ovary. White Electricity: It is neutral in nature and acts on both sensory and motor nerves, GI tract, Respiratory Tract, Pit of Stomach (Solar plexus), excretory system, skin etc.	5
Lassativo and SLass APP water for skin	They work on the Vegas nerve. It is an anti-constipation medicine that works as an excellent herbal laxative liquid. APP supplies the nourishment of the skin and keeps the skin fresh and smooth as a cosmetic.	1 each
Useful for both oral and Therapeutic uses at Proper dilution.	EH remedies are usually preserved in the process of producing organic alcoholic vehicles. But for prolonged preservation of D3 and D4 remedies alcoholic and soaked with sugar of milk is preferred.	Ref: 1-6, 40-47

Table 3. Selection of complex set of remedies

Lymph and blood Selection of specific Scrofoloso group remedy S1 to S12 Angiotico A1 to A3	Tissue remedy Selection of specific Canceroso group remedy C1 to C17	Individual organ/ system remedy Pettorale P1 to P4/ Febrifugo F1-F2/ Linfatico L1	Antiviral/ antiparasitic/anti- venereal remedy VermifugoVer1-Ver2/ Venereo Ven1	Liquid electricity Selected Liquid Red/ Blue/Green/Yellow/White Electricity			
I	II	IIIA	IIIB	IV			
▼	▼	▼	▼	▼			
Selected Complex set of Remedies							

on the Physiological law of nature that controls the sympathy and attraction, where all the functions of animal and vegetable life are existing. This control of living beings is governed by the Physiological law of selection, assimilation and relation. To achieve faster recovery, Count Cesar Mattei invented complex herbal remedies, governed by the action stated by Physiological law. According to these laws of nature,

the useful substances are appropriated and absorbed but useless and aliening substances are rejected^{1,2}. Thus, the appropriate complex remedies are automatically selected and absorbed by the affected organs until their final recovery and the other components of remedies are attenuated to get absorbed by other tissues and organs. Each specific of the remedies is composed of the active principles of several plants and herbs, which

in their combination completely cover and control the group of organs. Count Mattei mentioned that the diseased organ is more sensitive to the medicine than the healthy organ^{1,2,5}. Here, neither the remedy is used to directly kill the pathogen, nor any complex remedy is left unused. The regenerated inherent immune system does the recovery by killing pathogens with the help of regenerated T and B lymphocytes. Healing takes place for the affected organ and excretory organ simultaneously. As a result, an all-around faster recovery takes place in the system and no more unused appropriate complex remedies are left out. The healing of the inherent immune system by EH remedy makes it a comprehensive medical system, applicable to almost all diseases. It has been proven to work successfully in various clinical cases reported in books and journals 41-47. Starting from the previous pandemic in Japan during 2nd World War to the COVID-19 pandemic of the recent past, EH established its footprint in the WHO pandemic database⁴⁸⁻⁵¹.

Considering the efficacy and the difference in principles, it may be mentioned that the modus operandi **of** Homoeopathic treatment "Similia Similibus Curantur"⁵² may be appropriately modified for Complex organisms for EH as "Complex Complexis Curantur", enabling quick recovery of complex disease developed in complex human health 42,44-47.

4. Conclusion

Blood and lymph are two types of body fluids, flowing through the respective ducts and vessels inside the human body. The equilibrium or balance between blood and lymph maintains the "Homeostasis" condition to keep the body in a healthy state. The vitiation of blood or lymph or both will diminish the defensive response allowing the pathogen to develop the disease in the human body⁵³⁻⁵⁵. Medical investigations and treatments based on blood, are popularly reported a century ago. However, treatment using lymph has not been carried out so far. In EH, a major part of the remedies works on lymph flowing through numerous lymphatic vessels existing around various organs. The EH remedies do not directly kill the pathogens. But during propagation through the lymphatic vessels, pathogens are identified, trapped and destroyed by T and B lymphocytes. The waste materials or toxins thus

produced are carried away through lymph vessels and removed by the excretory organ.

In EH, the complex remedies follow the Physiological law of selection, assimilation and relation. Accordingly, the useful active substances are appropriated and absorbed, while useless and aliening substances are rejected⁴⁻⁶. Considering this principle, Mattei invented the complex herbal remedy containing the active principle of several plants that cover and control the organ and group of organs. On the application of a properly chosen complex remedy, the affected organ automatically selects and assimilates the remedy until its final recovery. The remaining parts are attenuated and communicated forward to get absorbed by other tissues or organs. Hence, the balance between blood and lymph is quickly achieved by destroying pathogens with the help of regenerated T and B lymphocytes and the inherent immune system is instantly retrieved and restored. The retrieval of the inherited immune system takes place by the recovery of vitiated blood or lymph. The faster recovery of damaged immune system^{1-3,48,49} enables EH a comprehensive medical system, applicable for the treatment of almost all diseases. Research is due in the above areas to enrich EH Science.

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6. References

- Mattei CC. Electro-Homoeopathic medicine A new medical system. Translated by Theobald RM. Second Edition, London: David Scott; 1891. p. 1, 2, 5, 6, 7.
- Glidden AJL. Stepping stones to Electro Homoeopathy, (Count Mattei's System of Medicine), Second Edition-Considerably Enlarged, London: Central Mattei Depoy; 1892. p. 8, 9, 10, 14, 23, 33.
- Mattei CC. Electro-Homoeopathy: The Principles Of New Science Discovered By Count Caesar Mattei, Of Bologna (1880). Second English Edition, Bologna, Printing Office Mareggiani; 1880. p. 15.
- 4. Mattei CC. The principles of Electro Homoeopathy, a new science, reprint edition, New Delhi: B Jain Publishers (P) Ltd; 2002. p. 16-27.

- Gliddon AJL. Stepping stones to Electro Homoeopathy, Sixth Edition (Revised), Reprint Edition, New Delhi: Jain Publishers (P) Ltd; 2002. p. 5-6.
- 6. Mattei CC. The principles of Electro-Homoeopathy A new science, Reprint Edition, New Delhi: Jain Publishers (P) Ltd; 2002. p. 226, 228.
- Ho R, Teai T, Bianchini J-P, Lafont R, Raharivelomanana. Ferns: From traditional uses to pharmaceutical development, chemical identification of active principles. Working with Ferns, Chapter 23, Springer Publisher; 2010. https://doi. org/10.1007/978-1-4419-7162-3_23 PMCid:PMC3116989
- 8. Viola H, Wasowski C, Marder M, Wolfman C, Paladini AC, Medina JH. Sedative and hypnotic properties of *Salvia guaranitica* St. Hil. and of its active principle, Cirsiliol. Phytomedicine. 1997; 4(1):47-51. https://doi.org/10.1016/S0944-7113(97)80027-X PMid:23195245
- 9. Pandey G. Active principles and median lethal dose of *Curcuma longa* Linn. International Research Journal Of Pharmacy. 2011; 2(5):239-41.
- Raghavenra H, Diwakr BT, Lokesh B R, Naidu KA. Eugenol — The active principle from clove inhibits 5-lipoxygenase activity and leukotriene-C4 in human PMNL cells. Prostaglandins, Leukotrienes and Essential Fatty Acids. 2006; 74(1):23-27. https://doi.org/10.1016/j. plefa.2005.08.006 PMid:16216483
- Ahmad I, Mehmood Z, Mohammad F. Screening of some Indian medicinal plants for their antimicrobial properties. Journal of Ethnopharmacology. 1998; 62(2):183-93. https://doi.org/10.1016/S0378-8741(98)00055-5 PMid:9741890
- AlQathama A, Bader A, Al-Rehaily A, Gibbons S, Prieto JM. *In vitro* cytotoxic activities of selected Saudi medicinal plants against human malignant melanoma cells (A375) and the isolation of their active principles. European Journal of Integrative Medicine. 2022. p. 49. https://doi.org/10.1016/j.eujim.2021.102083
- Etayo NLH, Llamas F, Acedo C. Ethnobotanical research and compilation of the medicinal uses in Spain and the active principles of *Chiliadenus glutinosus* (L.) Fourr. for the scientific validation of its therapeutic properties. Plants. 2021; 10(3). https://doi.org/10.3390/plants10030584 PMid:33808620 PMCid:PMC8003562
- 14. Mahesh B, Satish S. Antimicrobial activity of some important medicinal plant against plant and human pathogens. World Journal of Agricultural Sciences. 2008; 4(2008):839-43.
- 15. Kumar DRN, George VC, Suresh PK, Kumar RA. Cancerspecific chemoprevention and anti-metastatic potentials of Rheum emodi rhizome ethyl acetate extracts and identification of active principles through HPLC and GC-MS analysis. Pakistan Journal of Pharmaceutical Sciences. 2015; 28(1):83-93.
- 16. Soaresa AM, Ticli FK, Marcussi S, Lourenco MV, Januario AH, Sampaio SV. Medicinal plants with

- inhibitory properties against snake venoms. Current Medicinal Chemistry. 2005; 12(20):2625-41. https://doi.org/10.2174/092986705774370655 PMid:16248818
- 17. Sharma H, Parihar L, Parihar P. Review on cancer and anticancerous properties of some medicinal plants. Journal of Medicinal Plants Research. 2011; 5(10):1818-35.
- Afify AE-MMR, Fayed SA, Shalaby EA, El-Shemy HA. Syzygium cumini (pomposia) active principles exhibit potent anticancer and antioxidant activities. African Journal of Pharmacy and Pharmacology. 2011; 5(7):948-56.
- Guzmán-Gutiérrez SL, Gómez-Cansino R, García-Zebadúa JC, Jiménez-Pérez NC, Reyes-Chilpa R. Antidepressant activity of Litsea glaucescens essential oil: Identification of b-pinene and linalool as active principles. Journal of Ethnopharmacology. 2012; 143(2):673-9. https://doi.org/10.1016/j.jep.2012.07.026 PMid:22867633
- Khan AM. Chemical composition and medicinal properties of *Nigella sativa* Linn. Inflamapharmacology. 1999; 7: 15-35. https://doi.org/10.1007/s10787-999-0023-y PMid:17657444
- Wang X, Kapoor V, Smythe GA. Extraction and chromatography-mass spectrometric analysis of the active principles from selected chinese herbs and other medicinal plants. The American Journal of Chinese Medicine. 2003; 31(6):927-44. https://doi.org/10.1142/S0192415X0300165X PMid:14992545
- 22. Ijeh II, Ejike CECC. Current perspectives on the medicinal potentials of *Vernonia amygdalina* Del. Journal of Medicinal Plants Research. 2011; 5(7):1051-61.
- Tariq A, Rehman HK. Medicinal and aromatic plants-Expanding their horizons through omics, Elsevier Academic Press; 2020.
- Pitchai D, Manikkam R, Rajendran SR, Pitchai G. Database on pharmacophore analysis of active principles, from medicinal plants. Bioinformation. 2010; 5(2):43-45. https://doi.org/10.6026/9732063000543 PMid:21346859 PMCid:PMC3039985
- 25. Darwin, C. On the Origin of Species by Means of Natural Selection. London: John Murray, 1859.
- Dodson MM. Darwin's law of natural selection and Thom's theory of catastrophes. Mathematical Bioscience. 1976; 28:243-74. https://doi.org/10.1016/0025-5564(76)90127-9
- 27. Charles D. On the tendency of species to form varieties; and on the perpetuation of varieties and species by natural means of selection. Zoological Journal of the Linnean Society. 1858; 3(9):45-62. https://doi.org/10.1111/j.1096-3642.1858. tb02500.x
- Penuelas J, Baldocchi D. Life and the five biological laws. Lessons for global change models and sustainability. Ecological Complexity. 2019; 38:11-14. https://doi. org/10.1016/j.ecocom.2019.02.001
- Wikipedia. Baldwin effect. Available from: https:// en.wikipedia.org/wiki/Baldwin_effect#/media/File:

- Lamarck_Compared_to_Darwin,_Baldwin_Waddington. svg https://en.wikipedia.org/wiki/Baldwin_effect
- 30. Santambrogio L. Immunology of the lymphatic system. Springer New York Heidelberg Dordrecht London; 2013.
- 31. Yevatkar KT. Text book of pharmacy on Electro-Homoeopathy. New Delhi: B Jain Publishers Pvt. Ltd., Reprint edition; 2002. p. 29, 127-46.
- 32. Mahajan RT, Patil RA. Utility of indigenous plants in electropathy system of medicine. New Delhi: B Jain Publishers Pvt. Ltd.; 2021.
- 33. Boericke W. Pocket manual of homoeopathic Materia medica and repertory. Third revised and augmented edition based on ninth edition: Including Indian drugs. New Delhi: B Jain Publishers Pvt. Ltd., 3rd Revised and Augmented Edition based on 9th edition; 2008.
- 34. Mahajan RT. Medicinal plants used in Electro-Homoeopathy. New Delhi: B Jain Publishers Pvt. Ltd., 2nd Edition (Reprinted); 1992.
- 35. Sureshbabu P, Bhavya DC, Siddalingamurthy E. A process of Electro-homeopathic remedy "SLASS" preparation, compared with Krauss Method by phytochemical analysis, TLC and FTIR studies. European Journal of Medicinal Plants. 2021; 32(7):39-55. https://doi.org/10.9734/ejmp/2021/v32i730404
- 36. Singh DKA. A treatise on Electro-Homoeopathic pharmacy. 3rd Edition. Chapter 7, Low Price Publications; 2017. p. 44-54.
- 37. Kundu D. Pharmacodynamics in Electropathy. New Delhi: B Jain Publishers Pvt. Ltd. Reprint Edition: 1994; 1998.
- 38. Singh A. Spagyric medicine and vitiation of blood and lymph. Alchemy Journal. 2007; 8(1).
- 39. Das MR. Electro-Homoeo-Pharma-copedics, New Delhi: B Jain Publishers Pvt. Ltd, 2008.
- 40. Sureshbabu P, Siddalingamurthy E, Shashidhara NL, Sooryanarayanarao B, Bhavya DC. A review on electrohomeo-pathic medicinal practice: Origin, principles, medicinal plants used and its current status in India. European Journal of Medicinal Plants. 2020; 31(8):31-47. https://doi.org/10.9734/ejmp/2020/v31i830257
- 41. Yevatkar KT. Text book of Pharmacy on Electro-Homoeopathy. New Delhi: B Jain Publishers Pvt. Ltd., Reprint Edition; 2002. p. 29, 127-46.
- 42. Sinha NL. Materia medica and fundamental laws of electro complex homoeopathy. Kanpur: Dr N.L. Sinha and Sons, 7th Edition; 1989. p.136-40.

- 43. Gangopadhyay D. A treatise on Electro-Homoeopathy: Philosophy and materia medica. 2nd Edition; 1995. p. 107.
- 44. Krauss T. Nervous and mental diseases and treatment by Count Mattei remedies or Electro Homoeopathy, New Delhi: B Jain Publishers Pvt. Ltd, 2008.
- 45. Gliddon AJL. Electrohomeopathy treatment of various diseases. New Delhi: B Jain Publishers Pvt. Ltd, 2007.
- Mattei CC. Vade Macum of Electro Homeopathy, (Translated from Italian) and Revised by Kumar V, Reprint Edition: New Delhi: B Jain Publishers Pvt. Ltd, 1996.
- Sinha NL. Materia Medica and fundamental laws of electro complex homeopathy, 7th Edition, Kanpur: Dr. N. L. Sinha and Sons in Modern Remedies Press; 1989. p. 90.
- Taki GS, Mallick AK, Mondal A, Sheet SP, Mallick A, Chakrabort B. COVID-19 prophylactic and management studies based on Electro-Homeopathy. Indian Journal of Traditional Knowledge. 2022; 21(4):782-8.
- Taki GS, Mallick AK, Chakraborty B, Pal P, Biswas C, Samanta C. Electro-Homeopathy based COVID-19 Safe-Home Medical Management Study. Journal of Natural Remedies. 2022; 22(2):261-7. https://doi.org/10.18311/ jnr/2022/28201
- Taki GS, Mallick AK, Mondal A, Sheet SP, Mallick A, Chakraborty B. COVID-19 prophylactic and management studies based on Electro-Homeopathy. Indian Journal of Traditional Knowledge. 2022; 21(4):782-8.
- Taki GS, Mallick AK, Chakraborty B, Pal P, Biswas C, Samanta C. Electro-Homeopathy based COVID-19 safehome medical management study. Journal of Natural Remedies. 2022; 22(2):261-7. https://doi.org/10.18311/ jnr/2022/28201
- Hahnemann S. Organon of the Medical Art (Organon der rationellen Heilkunde). Edited and Annotated by O'Reilly WB; 1810.
- 53. Tortora GJ, Funke B, Case C. Case Microbiology: An Introduction. Edition 13th. Addison-Wesley, 2019.
- Murray RK, Granner DK, Mayes PA, Rodwell VW. Review of Physiological Chemistry. Regulation of Enzyme Activity, 26th Edition, Chapter 9, California: Large Medical Publications. 2003.
- 55. Chatterjee CC. Human Physiology. Calcutta: Medical Alled Agancy, Vol I, 12th Edition, 2018.