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A Systemetic and Scientific Review on the Acmella oleracea and its Traditional Medical and Pharmacological uses (AbstractView.aspx?PID=2022-12-1-11)

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A Systemetic and Scientific Review on the *Acemella oleracea* and its Traditional Medical and Pharmacological uses

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ABSTRACT:

Acemella oleracea L. R.K. Jansen belongs to the family Asteraceae is generally termed “toothache plant”. Though complex pattern has present or shows in the *Acemella* genus, the cylindrical discoid capitula which has a golden yellow in color with red tip make it unique. It is an annual herb, occurring around the world and, It is cultivated for horticultural and pharmacological purpose it is used in the treatment or prevention of various diseases or disorders in the human being or animal rheumatism, stuttering, paralysis of the tongue, antipyretic i.e. reduce body temperature, sore throat and gum infections. There are also others reports of the use of *Spilanthes acmella*, such as spices such as antiseptic i.e. these are the agents which are used to kill the growth of the microorganism on living tissue, antibacterial i.e. kill or inhibit the growth of bactria, antifungal, antimalarial i.e. these are the drug or agent which are used to inhibit or kill the parasite responsible for cause of malarial infection, remedy for toothache, influenza, cough i.e. Expel the mucos secretions from the respiratory tract and tuberculosis i.e. These are drug or agent which are used to inhibit causative microorganism of tuberculosis mycobacterium tuberculosis etc.

KEYWORDS: *Acemella oleracea*, Spilanthol, *Spilanthes acmella*, Toothache plant, *Spilanthes*. *Acemella Murr.*

INTRODUCTION:

Acemella oleracea L. R.K. Jansen belongs to the family Asteraceae is generally termed “toothache plant”. Though complex pattern has present or shows in the *Acemella* genus, the cylindrical discoid capitula which has a golden yellow in colour with red tip make it unique.^{1,2}

It is an annual herb, occurring around the world and, is cultivated for horticultural *Acemella oleracea* is an annual herb grows to a height of 15 - 30cm.

The whole plants have many pharmacological applications like in the treatment of dysentery and rheumatism and decoction of the plant can be taken internally for the purpose of diuretic which increases the formation and flow of urine and able to resolve bladder stones.

The decoction i.e. a concentrated liquor resulting from heating or boiling a substance, especially a medicinal preparation made from a plant. of leaves and flowers are used toothache, stomatitis.^{3,4}

The scientific name of this plant is *Acemella oleracea* and this contain "spilanthol", which is an isobutylamide and is well known for its larvicidal properties. The flower head part and the plant root were reported to be rich in active principles. This plant also contains Triterpenoids i.e., Spilanthol has a strong spicy taste, can produce anesthetic effects and local astringency effects.

Important traditional uses of this herb are it is used in the treatment of rheumatism, stuttering, paralysis of the tongue, antipyretic i.e. reduce body temperature, sore throat and gum infections. There are also others reports of the use of *Spilanthes acmella*, such as spices such as antiseptic i.e. these are the agents which are used to kill the growth of the microorganism on living tissue, antibacterial i.e. kill or inhibit the growth of bactria, antifungal i.e. Agent or drugs which used in the treatment of fungal infection, antimalarial i.e. these are the drug or agent which are used to inhibit or kill the parasite responsible for cause of malarial infection, remedy for toothache, influenza, cough i.e. Expel the mucos secretions from the respiratory tract and tuberculosis i.e. These are drug or agent which are used to inhibit causative microorganism of tuberculosis mycobacterium tuberculosis.

The demand on herbal medicines and their acceptance in international market because of potent pharmacological potential and high therapeutic value increasing therapeutic value have been proving to be real blessing to the people. However, efforts are needed to explore, standardise, and validate ayurvedic medicines for their potency, safety, and efficacy in order to bring them

to market as main line therapeutics. *Spilanthes acmella* refers to the important medicinal plant distributed in the tropical and subtropical regions around the world with rich source of therapeutic and medicinal constituents. The main constituents, namely, “spilanthol” and “acmellonate”, are sometimes used to reduce the pain associated with toothaches and can induce saliva secretion.^{5,6,7}

Synonyms:

- *Spilanthes oleracea*
- *Spilanthes acmella*

The toothache plant (*Acmella oleracea*) is a flowering plant native to Brazil. It has many names, including:

- *Spilanthes acmella*
- jambu
- electric daisy
- paracress
- eyeball plant

Vernacular name:

- Toothache plant, para-cress (En).
- Brede mafane, cresson de Para (Fr).
- Agriao do Para, jambú (Po).

Origin and Geographical Distribution:

Acmella oleracea is not known from the wild. It is thought to have been derived through cultivation from *Acmella alba* (L Her.) R.K. Jansen, a species native to Peru and Brazil. It must have been in cultivation for a considerable time and has spread throughout the tropics. It is locally cultivated throughout Africa and escapes from cultivation have been reported. In East Africa it has become naturalized. It was probably introduced in the Indian Ocean Islands by the Portuguese and subsequently spread in East Africa by Indian labourers who came to work on railroad construction around 1900.^{8,9,10}

Figure-1: *Acmella oleracea* plant

Chemical Constituents:

Acmella oleracea is already known to be a rich source of important bioactive compounds such as amides, α - and β -amyrinester, miricilic alcohol glycosides, sitosterol, saponins stigmasterol, and triterpenes which are attributed to different biological activites stigmasterol, and triterpenes

Figure-2: Structure of 3-Acetylaleuritolic acid, Spilantol, Scopoletin and Acmellonate

Scientific classification:

- Kingdom: Plantae
- Order: Asterales
- Family: Asteraceae
- Genus: *Acmella*
- Species: *A. oleracea*
- Phylum: Tracheophyta
- Biological name: *Spinthus Acmella*^{11,12}

List of *Acmella oleracea* Species:

Table-1: List of different species of *Acmella oleracea*

<i>Acmella alba</i>	<i>Acmella alpestris</i>	<i>Acmella uliginosa</i>
<i>Acmella leucantha</i>	<i>Acmella pilosa</i>	<i>Acmella leptophylla</i>
<i>Acmella lundellii</i>	<i>Acmella poliolepidica</i>	<i>Acmella leucantha</i>
<i>Acmella oleracea</i>	<i>Acmella radicans</i>	<i>Acmella sodiroi</i>
<i>Acmella oppositifolia</i>	<i>Acmella repens</i>	<i>Acmella psilocarpa</i>
<i>Acmella paniculata</i>	<i>Acmella serratifolia</i>	<i>Acmella pusilla</i>
<i>Acmella papposa</i>	<i>Acmella sodiroi</i>	<i>Acmella bellidoides</i>
<i>Spinthus acmella</i> Murr	<i>Spinthus acmella</i>	<i>Spinthus calva</i>
<i>Spinthus americana</i>	<i>Spinthus mauritiana</i>	

Traditional Uses:

Acmella oleracea plant is very popular among the ancient tribal community; from this plant in religious festival special food items are prepared. The poor people offered this plant along with the “Ajeng Dues” in Dobur Uie.

In particular, this plant is famous as a folklore remedy for toothache and for throat and gum infections. The flowers are crushed and applied at the site of toothache, particularly in “Irula tribe of Hasanur hills in Erode district of Tamilnadu” where

it is known by the local name “Mandal Poo Chedi”. Apart from Tamil Nadu, root paste of the plant is used in throat problems in Chhindwara and Betul district of Madhya Pradesh. The plant is also known to be used as panacea (Sumatra), as stimulant, for toothache (Sudan), for stomatitis (Java), and for wound healing (India).

In Cameroon, the plant is used as a snakebite remedy and in the treatment of articular rheumatism. It is supposed to be useful in cases of tuberculosis. In India, *S. acemella* flower heads are used to treat stammering in children. Leaves and flowers of the plant are also used to treat leucorrhoea in females among people of tribes in Bangladesh. The whole plant paste of *Spilanthes acmella* is also used as “poisonous sting” in Chittagong hill tracts of Bangladesh where the plant is also known as Jhummosak.^{13,14,15}

Medical Uses:

1. Diuretic:

Diuretics are the agent which increase the formation and excretion urine output of Experimentations on rats suggest that cold water extract of *Spilanthes acmella* acts as a loop diuretic.

2. Scurvy and Digestion:

Scurvy is a skin related disorder causes by the deficiency of vitamin C. The flower heads of *Spilanthes acmella* are used to prevent scurvy and for the purpose of proper or enhance digestion purpose.

3. Anti-Malarial:

These are the agent or drugs which are used in the management of malaria and the inhibition malarial parasite which causes malarial infection. These spilanthes acmella contained Spilanthal which shows activity against malarial parasite *Plasmodium falciparum* which causes malarial infection.^{16,17}

4. Rheumatism:

Rheumatism is a bone deformities disease arising in the elderly due to wear and tear of the joints. The entire plant can be used as a treatment for gouts.

5. Gastrointestinal diseases: Roots of these plant are used to chewed for the treatment of Gastrointestinal tract related disturbances.^{18,19}

6. Cosmetic:

These plant is also useful for cosmetic purpose its shows anti-wrinkle effect to treat wrinkle problem which are nowdays faced various womens and mans also so it's a magical herb to overcome this problem.

7. Other Uses:

It has also other benefits like Its leaves and flower is used to used in cough, flu and tuberculosis, throat complaints, headache and fever.

8. Local anaesthetic:

Local anaesthetics are the agent which cause loss of sensation in the specific body area these plant produce local anaesthetic effect.

9. Anti-fungal:

Spilanthes acmella shows minimal antifungal action. This is proved that the microsporum gypseum and cryptococcus neoformans fungi which are common opportunistic condition means a condition that occur especially or exclusively in person with weak immune system due to AIDS pathogens in AIDS patient.^{20,21}

Pharmacological applications of Acemella Oleracea:

Uses Species Part Used Type of Extract:

Table-2: Pharmacological applications of Acemella Oleracea ^{22,23,24}

Vasorelaxant	<i>S. acmella</i> Murr.	Aerial parts	Chloroform, hexane, ethyl acetate, methanol
Pancreatic lipase-inhibitory	<i>S. acmella</i>	Flowers	Ethanol
Local anaesthetic	<i>S. acmella</i> Murr.	NA	Aqueous
Insecticidal	<i>S. acmella</i>	NA	NA
Insecticidal	<i>S. calva</i>	Leaves and flowers	Petroleum ether, ethyl acetate and methanol
Insecticidal	<i>S. acmella</i> Murr.	Leaves and flowers	Aqueous
Immunomodulatory	<i>S. acmella</i>	Leaves	Ethanol
Immunomodulatory	<i>S. acmella</i> Murr.	Leaves	Ethanol
HIV-1 protease inhibitor	<i>S. acmella</i> L.	Whole plant	Chloroform, methanol and water
Diuretic	<i>S. acmella</i>	Leaves	Petroleum ether, chloroform and ethanol
Diuretic	<i>S. acmella</i>	Flowers	CWE

Convulsant	<i>S. acmella</i>	Whole plant	Hexane
Aphrodisiac	<i>S. acmella L. Murr.</i>	Flowers	Ethanol
Antiviral	<i>S. americana</i>	Flowers	NA
Antipyretic	<i>S. acmella Murr.</i>	NA	Aqueous
Antioxidant	<i>S. acmella</i>	Leaves, stems	Methanol
Antioxidant	<i>S. acmella Murr.</i>	Aerial parts	Chloroform, hexane, ethyl acetate, methanol
Antinociception, antihyperalgesic	<i>S. acmella</i>	Flowers	CWE
Antinociception, antihyperalgesic	<i>Acmella uliginosa, (Sw.) Cass</i>	Flowers	Methanol
Antimutagenic	<i>S. calva</i>	NA	Chloroform
Antimicrobial	<i>S. mauritiana</i>	Roots and flowers	NA
Antimicrobial	<i>S. americana</i>	Whole plant	Aqueous, ethanol and hexane
Antimicrobial	<i>S. calva</i>	Roots	Methanol
Antimicrobial	<i>S. acmella Linn.</i>	Flower heads	Petroleum ether
Antimicrobial	<i>S. mauritiana</i>	Roots and flowers	NA
Antimicrobial	<i>S. paniculata</i>	Leaves	NA
Antimalarial, larvical	<i>S. acmella Murr.</i>	Flowers	Ethanol
Antimalarial, larvical	<i>S. mauritiana</i>	Aerial parts	Methanol extract
Antimalarial, larvical	<i>S. acmella, S. calva, S. paniculata</i>	Flowers	Hexane
Antimalarial, larvical	<i>S. mauritiana</i>	Leaves	Crude powder
Antihepatotoxic	<i>S. ciliata</i>	Whole plant	Ethanol
Anti-inflammatory	<i>S. acmella</i>	Aerial parts	Ethanol
Anti-inflammatory	<i>S. acmella</i>	Aerial parts	Aqueous
Analgesic	<i>S. acmella</i>	Aerial parts	Aqueous

Acmella consists of several pharmacological actions, and a range of minor side effects is a familiar plant according to the Indian traditional system of medicine. In this current review, we have emphasized on ethnobotany, pharmacology, toxicology, phytochemistry plant material extraction procedure and phytochemical assays eloquently⁵⁹.

Phytoconstituent extracts from this plant species have shown to be effective in pharmacological responses such as anticonvulsant, anti-inflammatory, analgesic, diuretic, vasodilation and antimalarial effects. Periodically researchers had been projecting that the entire plant notably has local anesthetic, anti-inflammatory, antioxidant, aphrodisiac, antinociception, immunomodulator and very importantly insecticidal effect. Similarly, lipase inhibition properties, diuretic⁴², vasorelaxation, antifungal and pancreatic properties are the other noticeable activities, the flower part has been made known to produce.

The pharmacological responses and the traditional usage of *S. acmella* have been listed in this review. Therefore it would give all the relevant scientific information concisely to the scientific society. *acmella* consists of several pharmacological actions, and a range of minor side effects is a familiar plant according to the Indian traditional system of medicine. In this current review, we have emphasized on ethnobotany, pharmacology, toxicology, phytochemistry plant material extraction procedure and phytochemical assays eloquently⁵⁹.

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The pharmacological responses and the traditional usage of *S. acmella* have been listed in this review. Therefore it would give all the relevant scientific information concisely to the scientific society

CONCLUSION:

Acemella oleracea plant different species consists of several pharmacological actions, it is a familiar plant according to the Indian traditional system of medicine. In this current review, the pharmacological responses and the traditional usage of

Acemella oleracea and their different species have been listed in this review. This plant shows various magical effect like *Acemella oleracea* is boon for Malaria, Rheumatism, Scurvy, Tuberculosis, AIDS, Fungal, Dermatological problems, GIT related disturbances etc. and for the patients todays faced various life threatening diseases. Therefore, it would give all the significant scientific information concisely to the scientific society.

REFERENCE:

1. T.G.G. Uthpala, S.B. Navaratne. *Acemella oleracea* plant; Identification, Application and use as an Emerging Source Review. Food Reviews International. 2021; 37 (4).
2. Baby Joseph, Jency George., The role of *Acemella Oleracea* in medicine – A Review. World Journal of Pharmaceutical Research. 2782
3. Veda prachayasittikul, supaluk Prachayasittikul, Virapong Prachayasittikul, High therapeutic potential of Spilanthes Acmella: A Review. Excli Journal Experimental and Clinical Sciences 2013; 12: 291-312.
4. Suchita Dubey, Siddhartha Maity, Mahendra Singh, Subhini A. Saraf, and Sudipta Saha., Phytochemistry, Pharmacology and Toxicology of Spilanthes Acmella: A Review. Advances in Pharmacological and Pharmaceutical Sciences. 2013.
5. Rahul Sharma, Nedakantan Arumugam, N-alkylamides of Spilanthes (syn: Acmella): Structure, Purification, Characterization, Biological Activities and Application – A Review. Future Food. 2021; 3:100022.
6. P.B. Lalthanpuii, Zar Zolcimi, Kholring Lalchandama. The toothache Plant (*Acemella oleracea*) exhibits anthelmintic activity on both parasitic tapeworm and roundworms. Pharmacognosy Magazine. 2020; 16(68).
7. Jostsna Srinath, Laksmi T., Therapeutic potential of Spilanthes Acmella- A Dental Note., Int J. Pharma Sci. Res. 25(1) mar-Apr 2014 article No-26

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