



# BIOCHEMICAL ANALYSIS OF SIDDHA DRUG SARVA VIDA THODARI KULIGAI

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## ABSTRACT.

Siddha system of medicine was primarily sponsored and developed by siddhars in Tamil land. In siddha system, metallic preparations are used to cure many challenges diseases. Before preparations of medicine each drug must be purified to remove the impurities. So, this sarva vida thodari kuligai is a most wonderful herbo metallic preparation. Its cure particular type of poisons.

The main aim of the study was to evaluate the Biochemical analysis of the trial drug sarva vida thodari kuligai and it indicates the presence of calcium, Sulphate, chloride, starch, unsaturated compound, reducing sugar, Amino acid, Ferrous Iron which is being used for the treatment of poisoning such as; Aconitum ferox (naabi), white arsenic, opium (Papaver somniferum), snake bite, STD etc.,

**Keywords: Siddha medicine, Biochemical Analysis, Sarva vida thodari kuligai, Treatment of Poisons.**

## INTRODUCTION:

Siddha system of medicine is the oldest traditional system of medicine in world originated in state of Tamilnadu, India. The siddha system of medicine is one of the ancient and native system medicines. Siddha system is handled by a group of religious. Personalities identified as siddhars. Siddha system of medicine was primarily sponsored and developed by siddhars in Tamil land. They were highly Cultured, intellectual and spiritual faculties combined with divine aspects. Siddhars age is beyond our assessment. They considered that nature in man and man is nature. Man is nothing but a world in miniature containing the five elements and the various principles which constitute the mineral, the vegetable and the animal kingdoms. Man is the highest of all living beings

Sulphur occupies a very high place in Siddha medicine. It is used as catalytic agent in many of its medicines. When sulphur is used combination with mercury. The addition of sulphur is to control the fluidity of mercury.

In siddha system, metallic preparations are used to cure many challenges diseases. Before preparations of medicine each drug must be purified to remove the impurities. So, this sarva vida thodari kuligai is a most wonderful herbo metallic preparation. which is being used for the treatment of poisoning such as; Aconitum ferox (naabi), white arsenic, opium (Papaver somniferum), snake bite, STD etc.,

## MATERIALS AND METHODS:

### INGREDIENTS OF SARVA VIDA THODARI KULIGAI

| S.NO | DRUG           | SCIENTIFIC & BOTANICAL NAME | QUANTITY |
|------|----------------|-----------------------------|----------|
| 1.   | Ghandagam      | Sulphur                     | 02 part  |
| 2.   | Sathilingam    | Cinnabar                    | ¼ part   |
| 3.   | paruthi bark   | <i>Gossypium herbaceum</i>  | ¼ part   |
| 4.   | Aalamaram bark | <i>Ficus bengalensis</i>    | ¼ part   |
| 5.   | Sukku          | <i>Zingiber officinale</i>  | ¼ part   |
| 6    | Milagu         | <i>Piper nigrum</i>         | ¼ part   |
| 7    | Thippili       | <i>Piper longum</i>         | ¼ part   |
| 8    | Deer's Horn    | -                           | ¼ part   |
| 9    | Cow's ghee     | -                           | 04 part  |

Table 1

### Collection, Identification and Authentication of the Drug:

The required raw drugs were purchased from a well reputed country shop. They metal and minerals are identified and authenticated by Associate professor Dr. kingsly M.D (S), HOD, Department of PG Gunapadam, and plants are authenticated by Botanist of Government Siddha Medical College, Palayamkottai.

### Purification of the Drug:

All the ingredients of this herbal, metal and mineral formulation were purified according to the proper produce methods described in Siddha Classical Literature.

### Preparation of the Medicine:

Each purified ingredient is triturated with cow ghee for 8 days, then gently make into tablet form

### Biochemical analysis:

Screening the drug sarva vida thodari kuligai to identify the Biochemical properties present in the ingredient.

### Chemicals and drugs:

The chemicals used in this study were of analytical grade obtain from Department of Biochemistry, Government Siddha Medical College, Palayamkottai.

**Methodology:**

5 grams of the drug was weighed accurately and placed in a 250ml clean beaker. Then 50ml of distilled water added to it and dissolved well. Then it was boiled well for about 10 minutes. It was cooled and filtered in a 100ml volumetric flask and then it is made up to 100ml with distilled water. This fluid was taken for analysis.



## QUALITATIVE ANALYSIS

| S. NO | EXPERINIENTS   | OBSERVATION                         | INFERENCE                              |
|-------|--|-------------------------------------|--|
| 1.    | <b>TEST FOR CALCIUM:</b><br>2ml of the above prepared extract is taken in a clear test tube. To this add 2ml of 4% Ammonium oxalate solution | A white precipitate is formed       | Presence of calcium                    |
| 2.    | <b>TEST FOR SULPHATE:</b><br>2 ml of the extract is added to 5% barium chloride solution.  | A white precipitate is formed       | Presence of sulphate                   |
| 3.    | <b>TEST FOR CHLORIDE:</b><br>The extract is treated with silver nitrate solution.  | A white precipitate is formed       | Presence of chloride                   |
| 4.    | <b>TEST FOR CARBONATE:</b><br>The substance is treated with concentrated Hcl.  | No brisk effervescence is formed    | Absence of carbonate                   |
| 5.    | <b>TEST FOR STARCH:</b><br>The extract is added with weak iodine solution.   | Formation of blue color precipitate | Presence of starch                     |
| 6.    | <b>TEST FOR IRON FERRIC:</b><br>The extract is acidified with glacial acetic acid and potassium ferro cyanide.                               | No blue color is formed             | Absence of ferric iron                 |
| 7.    | <b>TEST FOR IRON FERROUS:</b><br>The extract is treated with concentrated Nitric acid and ammonium thio cyanide solution.                    | blood red color is formed           | Indicates the presence of ferrous iron |
| 8.    | <b>TEST FOR PHOSPHATE:</b><br>The extract is treated with ammonium molybdate and concentrated nitric acid.                                   | No yellow precipitate is formed     | Absence of phosphate                   |

|     |  |                                     |   |
|-----|--|-------------------------------------|---|
|     |  |                                     |   |
| 9.  | <b>TEST FOR ALBUMIN:</b><br>The extract is treated with Esbach's reagent.  | No yellow precipitate is formed     | Absence of albumin                            |
| 10. | <b>TEST FOR TANNIC ACID:</b><br>The extract is treated with ferric chloride.   | No blue-black precipitate is formed | Absence of tannic acid                        |
| 11. | <b>TEST FOR UNSATURATION:</b><br>Potassium permanganate solution is added to the extract.  | It gets decolorized                 | Indicate the presence of unsaturated compound |
| 12. | <b>TEST FOR THE REDUCING SUGAR:</b> 5 ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2 mins and add 8 – 10 drops of the extract and again boil it for 2 mins. | Color change occur                  | Indicates the presence of reducing sugar      |
| 13. | <b>TEST FOR AMINO ACID:</b><br>One or two drops of the extract is placed on a filter paper and dried it well. After drying 1% Ninhydrin is sprayed over the same and dried it well.                  | Violet colour is formed             | Indicates the presence of aminoacidic         |
| 14. | <b>TEST FOR ZINC:</b><br>The extract is treated with potassium ferrocyanide.   | No white precipitate is formed      | Absence of zinc                               |

Table 2

## RESULTS AND DISCUSSION:

The Bio chemical analysis of the trial drug sarva vida thodari kuligai was tabulated above in table 2.

The trial drug sarva vida thodari kuligai contains

1. calcium
2. Sulphate
3. Chloride
4. Starch
5. Ferrous ion
6. Unsaturated compound
7. Reducing sugar
8. Amino aci

mode of action of the trial drug sarva vida thodari kuligai which brings about the Bone Mineralisation osteoblastic and osteoclastic activity in the body. May be due to the presence of calcium, Sulphate, chloride, starch, unsaturated compound, reducing sugar, Amino acid, Ferrous Iron in it.

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