



## Phytochemical Analysis of *Tridax Procumbens L.*

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**Abstract:** The current study is aimed on the replacement of anti-viral, antibacterial, anti-fungal, anti-biotic, anti-Cancer, anti-ulcer, anti-pyretic drugs by use of medicinal herb *Tridax Procumbens L.* *Tridax Procumbens L.* is Commonly called as "Coat Buttons" or wild daisy or *Tridax daisy*. Medicinal properties of plants are due to presence of some bioactive Chemical Constituents. The present study of *Tridax Procumbens L.* suggest hereby that all natural products can be turned bioactive molecules as every diverse molecule possessing one kind or multiple kinds of biological & pharmacological activities. This photochemical analysis of *Tridax Procumbens L.* was Carried out by author shows that *Tridax Procumbens L.* Contains element like sulphur, Iron, Sodium, & Chlorines as well as gluoside, Amino acids, Flavanol, Synergic acid, Tannin, Steroids, polysaccharides, Pectin, Hemicellulose, Phenols, Alkaloids, fats & Volatile oils etc. & shows presence of some elements which are also observed in few drugs like anti-viral, antibacterial, anti-fungal, anti-biotic, anti-Cancer, anti-ulcer, anti-pyretic, anti-healing, anti-dandruff, hypotensive etc.

**Keywords:** *Tridax Procumbens L.*, Coat Button, Photochemical analysis, Anti-dandruff, Anti-healing.

### I. INTRODUCTION

*Tridax Procumbens L.* is a Common grass found in tropical southern part of Nigeria growing primarily during rainy seasons. It is annual herb with leaves opposites, incised toothed, broadly lance late, acute & with prostrate ascending stems.

S/N	Countries/Regions	Traditional Names
1	United state	Coat Button
2	Florida	Coat Button
3	California	Coat Button
4	India	Kambarmodi/Ghamara
5	English	<i>Tridax daisy</i> , wild daisy

#### Systematic Classification:

Kingdom Plantae  
Subkingdom Tracheobionta  
Super division spermatophyta  
Division Magnoliophyta  
Order Asteridae  
Family Asteraceae  
Species *Tridax Procumbens L.*

**Distribution:** Tropic & subtropics throughout the world.

### II. Methods/Techniques

Phytochemical analysis of leaves, stems, roots & flowers of *Tridax Procumbens L.* has been made to investigate some elements & organic Compounds present in leaf, stem, root & flower of *Tridax Procumbens L.* as well as to study important medicinal & pharmaceutical properties. It was carried out by subdividing into two parts.

Part-I: Elemental Analysis [test for elements in ash Content were performed by two methods i) ash dissolved in 20% HCl ii) ash dissolved in 20% NaOH]

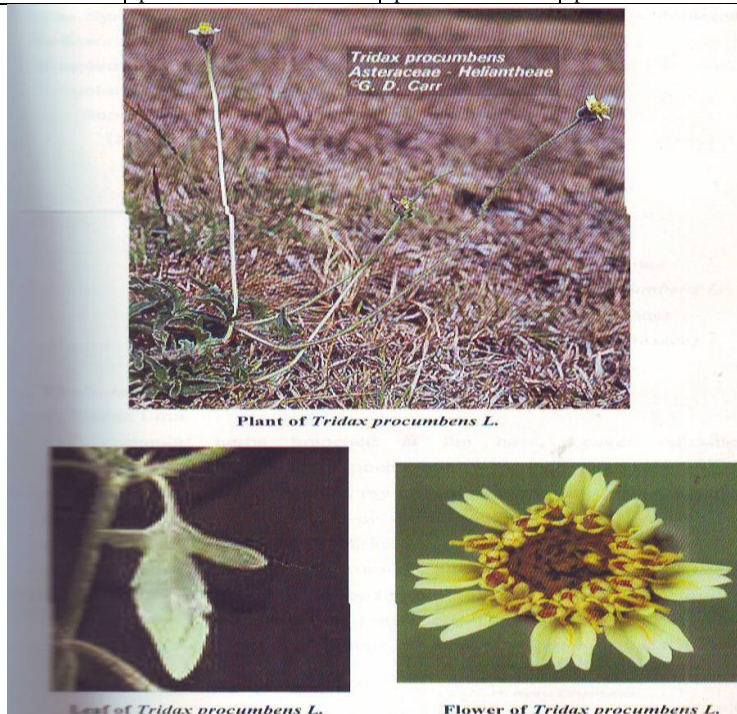
Part-II: Functional groups analysis.

First of all sample of plants were Collected & roots, stems, flowers & leaves were separated out. After drying at room temperature for 15days, then fine powder was treated as sample of root, stem, leaves, & flowers. In this method moist ash & Cold water, hot water, 1%NaOH, 1%HCl solubility of *Tridax Procumbens L.* have been investigated. In proximate analysis, elements, functional groups & individual Compounds identification of leaves, stems, roots & flowers of *Tridax Procumbens L.* have been studied. These were extracted in distilled water, ethanol, benzene, aq NaOH & HCl separately then Phytochemical Analysis was carried out.

#### Observations:

A) Ash dissolved in 20% HCl-test for Elements:

S/N	Elements	Ash of leaf sample	Ash of stem sample	Ash of root sample	Ash of flower sample
1	Mg	Absent	Absent	Absent	Absent
2	Ca	Absent	Absent	Absent	Absent
3	S	present	present	present	present
4	Fe	present	present	present	present
5	Na	present	present	present	present
6	Cl	present	present	present	present



B) Test for groups:

S/N	Groups	Ash of leaf sample	Ash of stem sample	Ash of root sample	Ash of flower sample
1	Glucoside	present	present	present	Present
2	Cynogenic glucoside	present	present	present	Present
3	Acubin type glucoside.	present	present	present	present
4	Phenol	present	present	present	present
5	Flavanol	present	present	present	present
6	Amino acid	present	present	present	Present
7	Alkaloids	present	present	present	Present
8	Steroids	present	present	present	Present
9	Tannin	present	present	present	Present
10	Fats	present	present	present	Present
11	Volatile oils	present	present	present	Present
12	Synergic acid	present	present	present	Present
13	Polysaccharides, Pectin, hemicellulose	present	present	present	Present

### III. Result

The sample of *Tridax Procumbens L.* have been reported to have presence of various elements like Sulphur, Sodium, Iron, Chlorine as well as groups like Volatile oils, fats, Synergic acid, Alkaloids, Phenols, Flavanol, Cynogenic Glucoside, Acubin gluCoside, Polysaccharides, Pectin, hemicelluloses etc. because of which *Tridax Procumbens L.* can be used for the treatment of anti-bacterial, anti-viral, anti-dandruff, emollient, anti-healing, analgesic, anti-AIDS, & can be used against various disorders. It was found that the drugs which are prescribed by allopathic Practitioner for the treatment of healing, hypotension & anti-biotics properties contains particular types of functional groups & nucleus those were also observed during this analysis.

### IV. Conclusion

Medical & biochemical literature survey reveals that Nimesulide, Paracetamol, Ibuprofen are used as analgesic, while Amoxicillin, cefrofloxin as antibiotics while Abacavir, Amantadine, Rumantadine, Lamivudine, Stavudine, Rabin are used as anti-viral drugs, Abelcet, Cytovene, Daunoxome, Eraxis, Taxol, Vistide are used as anti-

AIDs, while Lomustine, Arimidix,,Tagretin as anti-cancer & Ofloxacin as anti-bacterial & ketocanazole as anti-fungal , all the above said drugs are best for respective treatments but have some side effects, during this study it is observed that tridax procumbens L.is having curing capacity of above said diseases which further is studied by NMR & IR spectroscopy.