Research Article

Phytochemical analysis of *Wedelia* sp.

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ABSTRACT

Introduction: *Wedelia trilobata* was assessed for its antimicrobial, anticancerous, and toxicity effect. A phenolic compound is any compound containing a benzene ring with one or more hydroxyl group. **Materials and Methods:** Phytoconstituents are analyzed qualitatively using biochemical reactions. **Results:** It showed the presence of several secondary metabolites in *Wedelia*. **Conclusion:** Plants have used as a valuable source of natural products for natural therapies. Infectious diseases are the leading cause of death worldwide. *W. trilobata* was used as a traditional medicinal plant for the management of a variety of illness.

KEY WORDS: Leaf extract, Phytochemicals, *Wedelia trilobata*

INTRODUCTION

Medicinal plants are the reward of environment. The increase demand of natural products to treat the fast-growing infectious disease, herbal medicines make this a best and safe solution. *Wedelia* is a flowering plant belonging to Asteraceae family.[1,2] It blooms profusely with yellow-orange flowers that are borned individually on the last part of every stem. It is good for soil retention and erosion control. It has been used in conventional medicine. The compressed leaves are utilized as a poultice, tea brewed out of the plant leaves is known to improve symptom of colds and flu, and it is given in mixture with other herbs to clear the placenta after birth.[3,4] This research was conducted to study the phytochemical constituents of the methanolic extract of *Wedelia trilobata*.

MATERIALS AND METHODS

Plant Material Collection

The fresh leaf of the plant *W. trilobata* was collected from the university campus. It was taken into note that the leaves were delicately plucked, before the sunrise, and were transferred into a sterile polythene pack.

Plant Extract Preparation

About 250 g of the fresh leaves were taken, washed thoroughly, and transferred into a round-bottomed flask, and it was added 500 ml of methanol and 500 ml of distilled water and was preserved carefully until 10 days; the extraction was taken and was filtered using Whatman filter paper and further pure sample was obtained using the Soxhlet apparatus.

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Phytochemical Analysis[5]

The plant extract was evaluated for the presence of phytochemical parameters such as flavonoids, alkaloids, saponins, reducing sugars, tannins, terpenoids, carbonyls, phlobatannins, and steroids using standard analytical procedures.

RESULTS AND DISCUSSION

The phytochemical constituents of methanolic extract of *W. trilobata* were analyzed, and the outcome is tabulated [Table 1].

Conventionally, the natural plant products have been the source for searching the new drugs by pharmaceutical companies.[6,7] Phytochemical screening of the leaf

Table 1: Phytochemical analysis of the methanolic extract of *Wedelia trilobata*

Test	Leaf
Alkaloids	+
Glycosides	−
Terpenoids	+
Reducing sugars	−
Saponins	+
Tannin	+
Carbonyl	−
Phlobatannins	−
Steroids	−
Flavonoids	+

+: Positive, −: Negative

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extract showed the presence of alkaloids, terpenoids, saponin, tannins, and flavonoids. Similarly, glycosides, reducing sugars, and steroids showed the negative results.

CONCLUSION

Here, we conclude from our experimental work of *W. trilobata* as; the Phytochemical analysis resulted that the extraction contained many phytoconstituents such as alkaloids, terpenoids, saponin, tannin and flavonoid, that boosts the medicinal property of the plant and are able to inhibit the plant and animal pathogenic bacteria and fungi.

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