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ANTIHELMINTICS ACTIVITY AND ANTIFUNGAL ACTIVITY ETHANOLIC ACTIVITY OF CARICA PAPAYA IN SYNERGISTIC ACTIVITY AND IN VITRO SYNERGISTIC ACTIVITY

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ABSTRACT

Bioactive compounds from vegetal sources are a potential source of natural antifungic. challenging the extracts (LE, SRE, SUE) from the best extraction treatment against three phytopathogenic fungi: Rhizopus stolonifer, Fusarium spp. and Colletotrichum gloeosporioides.

INTRODUCTION

Antihelmintics are drugs that are used to treat Infections caused by paristic worms (helminths). Antifungal are the drugs that treat fungal infection. Antioxidants are substances that can prevent or slow damage to cells caused by free radicals. Now a day herbal formulations generally used to avoid any side effect.

LITERATURE REVIEW

For checking in vitro antihelmintics activity pheretima posthuma earthworm was used.

- The ethanolic and aquous extract with concentration 10, 20, 50, 100mg/ ml is given for the activity experiment.
- The plant extract/ standard are pour in petri dishes and earthworm are released. The assay is prepared with the reference of below paper.
- Helminths infections is major problem for the health care. Focusing on herbal formulations will give us better results.
- Herbal plants used for the treatment are Butea Monospora (Fabaceae), semicarpus anacardium (Anacardium), Abutilon indicum (Malvaceae).
- Antifungal activity is of drugs is checked on sabouraud dextrose agar and determine the zone of inhibition.
- Antioxidants activity is carried out using DPDH radical scavenging activity.

AIM AND OBJECTIVE

Aim

- 1) To evaluate antihelmintic activity.
- 2) To evaluate Antifungal activity.
- 3) To evaluate antioxidant activity.

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Title: To evaluate synergistic antihelmintic and antifungal activity of carica papaya linn. in vitro study.

Objective

- 1. To reduce helminthic infections
- 2. To treat fungal infection
- 3. To prevent symptoms of aging.

Need of Work

The problem of antihelmintics resistance, toxicity, and the increasing concern over the presence of drugs in animal products has led to a renewal of intrest in use of plant based

Drugs

- Synthetic antifungal drugs shows resistance in the body so the herbal drugs is the major need in the therapy.
- Ayurveda say the herbal drugs don't have side effect.

Plan of Work

- Procurement of drugs: Carica papaya herbal extract.
- Procurement of parasite and fungi:
- Earthworm- pheretima
- Fungi candida albicans
- Procurement of equipment: Incubator, Dessicator autoclave, UV.
- Procurement of chemical: ethanol, agar, methanol dimethyl
- formide, peptone, DMSO, Dextrose.
- Activity: antihelmintic activity
- Antifungal activity
- antioxidant activity



MATERIAL AND METHOD

- 1. Collection and authentication of plant material
- 2. Preparation of extract by Soxhelt apparatus
- 3. Phytochemical screening of herbal extract
- 4. Detection of tannins and flavonoids with the help of UV spectroscopy.
- 5. Drugs and chemicals Albendazole, Fluconazole, DPPH, Ascorbic acid.

METHODOLOGY

- 1. Antihelmintic activity procurement of parasite (earthworm) Antihelmintic assay preparation using petri plate. Preparation of concentration of standard AlbendazoleConcentration 10, 20, 50, 100 mg / ml.Evaluation of activity -Determine time required for paralysis.Determine time required for death.
- 2. Antifungal activity Procurement of fungi candida albicans Preparation of media (sabouraud dextrose media). Preparation of inoculum (candida albicans strain) Estimation of zone of inhibition.Statistal analysis.
- 3. Antioxidant of control and standard solution. Taking observation of standard and test solution. Determination of % decrease in absorbance.

Hypothesis

Ayurveda says the use of herbal drugs don't have any side effect. Also it says when the herbal drugs when given in combination increase the activity. So in the present research we hypothesis that the use of herbal drugs in combination with the standard drugs may ameliorate the risk of helminthic and fungal infection.

CONCLUSION

The study mainly design various experiment in different animals The antihelmintics activity and antifungal activity are the extract of carica papaya.

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