



AN OVERVIEW OF CERTAIN TRADITIONAL MEDICINAL PLANTS HAVING ANTHELMINTIC PROPERTIES

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ABSTRACT

The powerful source of many pharmacological activity was medicinal herbs. The capacity of the plant and its chemical to treat a disease that results in significant financial loss and decreased animal production for livestock owners is one of the reasons why plants with anthelmintic action have attracted so much interest. The pathogenic infection has a serious impact on mortality and other issues that could not be addressed because of the host organism's anthelmintic resistance. Despite the fact that numerous synthetic medications were generated, their negative effects outweighed their therapeutic benefits. As a result, there is a huge interest in researching plants for treatment, and this article provides a list of a few medicinal herbs that have been shown to be effective in lowering helminthic infection.

KEYWORDS: Helminthic Infection, Anthelmintic action, Pathogenic Infections, Medicinal Plants.

INTRODUCTION

Infectious diseases are illnesses brought on by pathogens, which are dangerous substances that enter your body. Viruses, bacteria, fungus, and parasites are the most frequent culprits. Typically, infectious diseases are passed from one person to another, through contaminated food or drink, and through insect bites. Internal processes, rather than external agents, cause non-infectious diseases, such as heredity, anatomical variations, ageing, and environmental factors. Infection with parasitic worms termed helminths causes the macroparasitic disease helminthiasis, often recognized as worm infection, to spread to both humans and other animals. These parasites come in a variety of species and are classified as roundworms, tapeworms, and flukes. Livestock is important in developing countries for sustaining the livelihoods of poor farmers, shoppers, traders, and workers. Global cattle productivity continues to be significantly hampered by parasitic diseases.^[1] The causative agent of Haemonchosis, *Haemonchus contortus*, is a nematode parasite that feeds on the blood of small ruminant animals and causes anaemia, anorexia, reduced growth, and eventually death in the host animals.^[2-3]

pharmacotherapy with manufactured medications or customary prescription as an option. Anthelmintics are medications used to treat parasitic worm diseases. Included in this are both round and degree of worms like nematodes and flukes. They are extremely important for both human tropical drugs and veterinary medicine. According to the World Health Organization, an astounding 2 billion people are infected with parasitic worms. Parasitic worms also contaminate domesticated animals and yields, influencing food production and having a financial impact. The disease of local pets is also significant.^[4]

Helminthic contamination can be avoided by keeping the environment clean and treating it, as well as using

Table 1: Details about plants having antifungal activity.

SL. No	Name of the Plant	Part used for study	Extract used for study	Name of the Fungus	Ref.
1.	Alternanthera pungensKrunth	Whole Plant	Hexane extract, Chloroform extract, Ethyl acetate extract, methanol extract	Pheritimaposthuma	[5]
2.	Eupatorium triplinerve Alpinia galanga	Leaf Rhizome	Ethanol Extract	Pheritimaposthuma Ascardia galli	[6]
3.	Camellia sinensis L. Albizia lebbeck L.	Leaves Whole Plant	Ethanol extract	Haemonchuscontortus	[7]
4.	HymenodictyonPachyanta	Bark Stem	Methanol Extract	HaemonchusContortus	[8]
5.	Achyranthes aspera Linn.	Leaves Whole Plant	Ethyl Acetate Extract, Ethanol Extract, Aqueous extracts	Pheretimaposthuma	[9]
6.	Cassia occidentalis Guiera senegalensis	Stem Bark	Methanol Extract	H. contortus	[10]
7.	Bauhinia racemosalinn	Whole Plant	Aqueous extract Petroleum ether extract Ethanol extract	Pheretimaposthuma	[11]
8.	Chenopodium ambrosioides Lawsoniainermis Jatropha curcas	Leaves Seeds	Aqueous extract Hydroalcoholic extract	Haemonchuscontortus	[12]
9.	Delonix regia Raffin	Flower	Methanol extract Aqueous extract	Pheritimaposthuma	[13]
10.	Amaranthus spinosus Amaranthus caudatus Amaranthus viridis L	Whole Plant	Methanol extract	Pheritimaposthuma	[14]
11.	Punica granatum Linn Berberis lyciumRoyle	Root Fruit Peel Leaf	Methanol extract	HaemonchusContortus	[15]
12.	Polygonum lapathifolium	Flower	Methanol extract	Pheretimaposthuman	[16]
13.	Adhatoda vesica	Roots	Aquesous extract Methanol Extract	HaemonchusContortusTrichostrongylusColubriformis TrichostrongylusAxei OesophagostomumColumbianum StrongyloidesPapillosus Trichuris Ovis	[17]
14.	Ocimumgratissimum Cymbopogon citratus	leaves	Acetone Extract	Haemonchusplacei	[18]
15.	Carica papaya Cucurbita Mexicana Hedychium coronarium Butea monosperma	Seed Rhizome Oil Whole	Aquousextract Etheral Extract Alcoholic extract	Ascaris lumbricoides and Ascaridia galli Monieziaexpansa, Fasciolopsisbuski, Ascaris lumbricoides and Hymenolepisdiminuta Ascaris lumbricoide, Ascaridia galli, earthworm,	[19]

	Azadirachta indica Nigella sativa Zanthoxylum alatum Punica granatum Ocimum sanctum Berlina grandiflora Evolvulusalsinoides Melia azedarach Rubus fruticosus Mangifera indica Saussurealappa Zingiber officinale Matricaria chamomilla Dioscoreazingiberensis Paris polyphylla Ferulaasafoetida Allium sativum Balanite Alangiumlarmarckii Piper betle Piper longum Semecarpus anacardium Mimusopselengi Cardiospermum Halicacabum Evolvulusalsinoides	Plant Leaves Bark Stem Fruit	Methanolic Extract	Toxocaracanis, Dipylidium caninum and Taenia Pheretimapasthuma C. elegans N. brasiliensis T. solium Haemonchuscontortus Trichostrongylus, Haemonchus and Trichuris Ascaris lumbricoides Driofilariaimmitis Dactylogyrus intermedius	
16.	Allium sativum Peganum harmala Chenopodium ambrosioides Artemisia absinthium Punica granatum	Leaves Stems Flowers	Aqueous extracts	BunostomumTrigonocephalum mixed gastrointestinal nematode infection Taenia sagginata	[20]
17.	Momordica Charantia, Cucurbita Pepo L. solanum torvum	Seeds	Aqueous extracts Methanolic Extract	PheretimaPosthuma	[21]
18.	Prunella vulgaris L	Leaves Stems Flower	Aqueous extracts Methanolic Extract	Haemonchuscontortus	[22]
19.	Allium sativum Zingiber officinale Cucurbita Mexicana Annona senegalensis Ficus religiosa Artemisia brevifolia Calotropis procera Pycnanthusangolensis Nicotiana tabacum Vernonia amygdalina	Stems Roots Leaves	Aqueous extract Methanolic Extract	Ascaris lumbricoides Strongyloidesstercularis Giardia intestinalis Ancylostoma duodenale Entamoeba histolytica Enterobis vermicularis Taenia saginata Trichinella spp. Necator americanus Diphyllbothrium latum	[23]
20.	Dioscoreabulbifera L.	Flesh and Peel of the Bulbils	Methanolic Extract	Fasciola gigantica Pheritimaposthuma	[24]
21.	Corchorus Olitorious Ananas Comosus Oxalis Corniculata Polygonum hydropiper Tinospora Tomentosa Momordica charantia	Whole Plant	Aqueous extract Ethanol extract	Haemonchus contortus Trichostrongylus Spp. Trichuris Spp. Strongyloidsapillosus Oesophagostomumcolumbianum BunostomumTrigonocephalum	[25]

	Azadirachta indica Heliotropium indicum Amaranthus spinosus Mimosa pudica Allivum Sativum				
22.	Tagetes diminuta Moringaolifera	Leaves Fruits	Aqueous- ethanolic extract Petroleum ether Chloroform extract Methanol extract	PheritimaPosthuma	[26]
23.	Clitoriaternatea Linn. Guazumaulmifolia Lam. Madhuca indica Gmel	Bark Seeds	Ethanolic extract	PheretimaPosthuma	[27]
24.	Chenopodium album L. Caesalpinia crista L. TrianthemaPortulacastrum L. Musa Paradisiaca L. Cocos nusifera L. Hedera helix L. Myrsine Africana Rapaneamelanophloeos Albizia Schimperianaoliv. Leucas martinicensis Senna Accidentalisis Combretum mole Bruceajavanica Carica Papaya L. Coriandrum sativum Agave sisalana perr. Khaya senegalenis Paris polyphylla Ocimum Sanctum Ficus species Butea monosperma Artemisia brevifolia Pycnanthus angolensis Sphenocentrum jollyanum	Leaves	Methanol extract Aqueous extract Hydroalcoholic extract	Trichostrongylid Haemonchus contortus Dactylogyrus intermedics Heligmosomides polygyrus Syphacia obvelata Aspicularis tetraptera Vampirolepis nana Eudrilus eugeniae	[28]
25.	Annona squamosa Azadirachta Indica Punica granatum	Leaves Barks	Ethanol extract	Pheretima posthuma Annelida Megascrolecidae	[29]
26.	Kalanchoe pinnata	Leaves	Petroleum ether extract Methanolic extract	Pheretima posthuma	[30]
27.	Clausena anisata Zanthoxylum zanthoxyloides Punica granatum	Whole Plants	Ethanolic extracts	Ascaris suum	[31]
28.	Agatigratifolia Agrimonia eupatori Butea fondosa Carica papaya Combretum mucoreatum Cucurbita moschata Hagenia abyssinica	Leaf Whole Plant	Aqueous Extract	Ascaris lumbricoides	[32]

	Helleborus niger and Mangifera indica				
29.	Ribes nigrum T. cordata T. platyphyllos T. vulgaris Salix spp. Trifolium repens	Leaves Flowers barks	Acetone extract Aqueous extract	Oesophagostomum dentatum	[33]

CONCLUSION

Many medicinal plants have been evaluated for their anthelmintic properties; however, a few plants still need to be certified for proficiency and security. Various therapeutic plants have been used for the treatment of the aforementioned diseases since antiquity, but without knowing their true mechanism and genuine compound responsible for the curing action.

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DATA AVAILABILITY

It has not been confirmed.

CONFLICT OF INTEREST

The authors clearly state that they have no conflicts of interest. There is no source of funding, and no external funds have been declared.

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