



A REVIEW ON MEDICINAL PLANTS HAVING ANTHELMINTIC ACTIVITY

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ABSTRACT

Anthelmintics are drugs that are utilized to treat diseases with parasitic worms. Medicinal plants were the powerful wellspring of numerous pharmacological activities. Among that the plants of anthelmintic activity has achieved an extraordinary enthusiasm due the ability of the plant and its compound to treat an illness that causes major monetary misfortune and diminished domesticated animals generation to the domesticated animals holders. The present article manages a review on plants which have been deductively assessed for anthelmintic movement for supporting their old stories use as conventional drug.

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INTRODUCTION

Helminthic contamination is one of the medical issues that influence human and animals on the planet. The helminths which contaminate the gastrointestinal framework are cestodes, nematodes, and trematodes. The manufactured medications accessible have been appeared to have symptoms; in addition, obstruction of the parasites to existing medications is expanding.<sup>1</sup> In view of restricted accessibility and moderateness of present day medications, the majority of the total populace depends to a more prominent degree on traditional medical remedies.<sup>2,3</sup> Helminthic contamination could be forestalled by keeping up condition clean and treatment and in addition pharmacotherapy utilizing manufactured medications or customary prescription as option. Anthelmintics are drugs that are utilized to treat diseases with parasitic worms. This incorporates both level worms, e.g., flukes and tapeworms and round worms, i.e., nematodes. They are of immense significance for human tropical drug and for veterinary medication. The World Health Organization appraises that an amazing 2 billion individuals harbor parasitic worm contaminations. Parasitic worms likewise taint domesticated animals and yields, influencing sustenance generation with a resultant financial effect. Likewise of significance is the disease of local pets. In reality, the buddy creature advertises is a noteworthy monetary thought for creature wellbeing organizations undertaking drug revelation programs.<sup>4</sup>

Medicinal Plants Having Anthelmintic Activity

Various medicinal plants possess anthelmintic activity. The list of medicinal plants having anthelmintic activity is given below:

S. No.	Plant Name	Family	Plant Part used
1.	<i>Acacia auriculaeformis</i> A. Cunn. <sup>5</sup>	Mimosaceae	Whole Plant
2.	<i>Acacia nilotica</i> <sup>6</sup>	Fabaceae	Fruit
3.	<i>Acacia Suma</i> Roxb <sup>7</sup>	Fabaceae	Bark
4.	<i>Acalypha Fruticosa</i> <sup>8</sup>	Euphorbiaceae	Whole plant
5.	<i>Acalypha indica</i> Linn <sup>9</sup>	Euphorbiaceae	Leaves
6.	<i>Achyranthes aspera</i> <sup>10</sup>	Amaranthaceae	Whole Plant
7.	<i>Acokanthera schimper</i> <sup>10</sup>	Apocynaceae	Leaves
8.	<i>Aegle marmelos</i> Linn <sup>11</sup>	Rutaceae	Fruits
9.	<i>Agatigratifolia</i> <sup>12</sup>	Leguminosae	Whole Plant
10.	<i>Agave sisalana</i> Perr <sup>13</sup>	Agavaceae	Whole Plant
11.	<i>Ailanthus excelsa</i> Roxb <sup>14</sup>	Simaroubaceae	Bark
12.	<i>Albizia schimperiana</i> <sup>15</sup>	Mimosaceae	Stem bark
13.	<i>Anemone vitifolia</i> Var. <sup>16</sup>	Ranunculaceae	Root
14.	<i>Artemisia absinthium</i> <sup>17</sup>	Asteraceae	Aerial Parts
15.	<i>Artemisia brevifolia</i> <sup>13</sup>	Asteraceae	Whole Plant
16.	<i>Azadirachta indica</i> A. Juss <sup>18</sup>	Meliaceae	Seeds
17.	<i>Barringtonia acutangula</i> Gaertn <sup>19</sup>	Lecythidaceae	Leaves
18.	<i>Bauhinia purpurea</i> Linn <sup>20</sup>	Fabaceae	Whole Plant
19.	<i>Bauhinia racemosa</i> Linn <sup>21</sup>	Fabaceae	Whole Plant
20.	<i>Bixa orellana</i> <sup>22</sup>	Bixaceae	Seeds
21.	<i>Brucea javanica</i> <sup>23</sup>	Simaroubaceae	Fruits
22.	<i>Butea monosperma</i> <sup>13</sup>	Fabaceae	Seeds
23.	<i>Caesalpania pulcherrima</i> Linn <sup>24</sup>	Leguminaceae	Flowers
24.	<i>Caesalpinia crista</i> L. <sup>25</sup>	Fabaceae	Whole Plant
25.	<i>Calotropis procera</i> <sup>26</sup>	Apocynaceae	Flowers
26.	<i>Cannabis sativa</i> Linn <sup>27</sup>	Cannabinaceae	Leaves
27.	<i>Carica papaya</i> Linn <sup>28</sup>	Caricaceae	Seeds
28.	<i>Carum copticum</i> <sup>12</sup>	Umbelliferae	Seeds
29.	<i>Cassia tora</i> Linn <sup>29</sup>	Fabaceae	Leaves
30.	<i>Chenopodium album</i> L. <sup>25</sup>	Amaranthaceae	Seeds

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31.	<i>Cissampelos pareira</i> Linn <sup>30</sup>	Menispermaceae	Leaves
32.	<i>Citrus aurantium</i> Linn <sup>31</sup>	Rutaceae	Fruit juice
33.	<i>Cleome icosandra</i> Linn <sup>32</sup>	Capparidaceae	Seeds
34.	<i>Clerodendrum phlomidis</i> Linn <sup>33</sup>	Verbanaceae	Aerial parts
35.	<i>Clerodendrum viscosum</i> <sup>34</sup>	Verbanaceae	Leaves
36.	<i>Clitoria ternatea</i> Linn <sup>35</sup>	Fabaceae	Whole plant
37.	<i>Combretum molle</i> <sup>36</sup>	Combretaceae	Leaves
38.	<i>Corallocarpus epigaeus</i> Rottl <sup>37</sup>	Cucurbitaceae	Roots, rhizomes
39.	<i>Coriander sativum</i> <sup>13</sup>	Apiaceae	Seeds
40.	<i>Cosos nucifera</i> L. <sup>38</sup>	Arecaceae	Fruit
41.	<i>Cymbopogon schoenanthus</i> Linn <sup>39</sup>	Poaceae	Leaves
42.	<i>Cymbopogon Martinii</i> Roxb <sup>39</sup>	Poaceae	Leaves
43.	<i>Embelia kilimandschiraca</i> <sup>40</sup>	Myrsinaceae	Roots
44.	<i>Embelia ribes</i> <sup>41</sup>	Myrsinaceae	Seeds
45.	<i>Eupatorium triplinerve</i> <sup>42</sup>	Asteraceae	Flowers
46.	<i>Evodia rutaecarpa</i> <sup>43</sup>	Rutaceae	Whole Plant
47.	<i>Evolvulus alsinoides</i> Linn <sup>44</sup>	Convolvulaceae	Whole Plant
48.	<i>Ferula foetidissima</i> <sup>45</sup>	Rubiaceae	Whole Plant
49.	<i>Ficus bengalensis</i> Linn <sup>46</sup>	Moraceae	Fruits
50.	<i>Ficus religiosa</i> <sup>47</sup>	Moraceae	Whole Plant
51.	<i>Fumaria parviflora</i> <sup>48</sup>	Fumariaceae	Plant powder
52.	<i>Gloriosa superba</i> Linn <sup>49</sup>	Liliaceae	Whole Plant
53.	<i>Guazuma ulmifolia</i> Lam <sup>35</sup>	Sterculiaceae	Whole plant
54.	<i>Gymnema Sylvestre</i> R.Br <sup>50</sup>	Asclepiadaceae	Leaves
55.	<i>Hedera Helix</i> L. <sup>51</sup>	Araliaceae	Fruits
56.	<i>Helleborus niger</i> <sup>52</sup>	Ranunculaceae	Stem
57.	<i>Jalans regia</i> Linn <sup>52</sup>	Juglandaceae	Leaves
58.	<i>Jasminum abysynicum</i>	Anacardiaceae	Leaves
	<i>Rhus vulgaris</i> <sup>40</sup>		
59.	<i>Jussiaea hyssopifolia</i> <sup>53</sup>	Onagraceae	Whole Plant
60.	<i>Khaya senegalensis</i> <sup>13</sup>	Meliaceae	Bark
61.	<i>Lawsonia inermis</i> Linn <sup>54</sup>	Lythraceae	Leaves
62.	<i>Leonotis nepetifolia</i> <sup>55</sup>	Lamiaceae	leaves
63.	<i>Leptadenia pyrotechnica</i> Forssk <sup>56</sup>	Asclepiadaceae	Stem
64.	<i>Leucas martinicensis</i> <sup>15</sup>	Lamiaceae	Aerial parts
65.	<i>Madhuca indica</i> <sup>35</sup>	Sapotaceae	Whole plant
66.	<i>Mangifera indica</i> <sup>12</sup>	Anacardiaceae	Whole Plant
67.	<i>Manihot esculenta</i> Linn <sup>57</sup>	Euphorbiaceae	Leaves
68.	<i>Melia azedarach</i> Linn <sup>58</sup>	Meliaceae	Whole Plant
69.	<i>Murraya koenigii</i> Spreng <sup>59</sup>	Rutaceae	Leaves
70.	<i>Musa paradisiaca</i> L. <sup>60</sup>	Musaceae	Leaves
71.	<i>Myrsine africana</i> <sup>61</sup>	Primulaceae	Leaves and Fruits
72.	<i>Nauclera latifolia</i> <sup>62</sup>	Rubiaceae	Stem and bark
73.	<i>Neolamarckia cadamba</i> Linn <sup>63</sup>	Rubiaceae	Bark
74.	<i>Nicotiana tabacum</i> Linn <sup>64</sup>	Solanaceae	Leaves
75.	<i>Nigella sativa</i> Linn <sup>65</sup>	Ranunculaceae	Essential Oil
76.	<i>Ocimum sanctum</i> Linn <sup>66</sup>	Lamiaceae	Essential Oil and Eugenol
77.	<i>Pandanus fascicularis</i> Linn <sup>67</sup>	Pandanaceae	Leaves
78.	<i>Paris polyphylla</i> <sup>13</sup>	Melanthiaceae	Rhizomes
79.	<i>Parkia Biglobosa</i> <sup>68</sup>	Fabaceae	Leaves
80.	<i>Piltostigma thonningii</i> (Schum.) <sup>69</sup>	Caesalpiniaceae	Stem bark
81.	<i>Prosopis cineraria</i> Linn <sup>70</sup>	Mimosaceae	Bark
82.	<i>Pycnanthus angolensis</i> <sup>71</sup>	Myristicaceae	Stem bark
83.	<i>Quisqualis indica</i> <sup>72</sup>	Combretaceae	Seeds
84.	<i>Randia dumetorum</i> <sup>73</sup>	Rubiaceae	Seeds
85.	<i>Rapanea melanophloeos</i> <sup>61</sup>	Myrsinaceae	Fruits
86.	<i>Sapindus trifoliatus</i> Linn <sup>74</sup>	Sapindaceae	Seeds
87.	<i>Saraca indica</i> Linn <sup>75</sup>	Caesalpinaceae	Leaves
88.	<i>Senna occidentalis</i> <sup>15</sup>	Fabaceae	Leaves
89.	<i>Sesbania grandiflora</i> Linn <sup>76</sup>	Fabaceae	Bark
90.	<i>Sphenocentrum jollyanum</i> <sup>71</sup>	Menispermaceae	Fruits and Seeds
91.	<i>Spondias pinnata</i> Linn <sup>77</sup>	Anacardiaceae	Bark
92.	<i>Strobilanthes discolor</i> T. Anders. <sup>78</sup>	Acanthaceae	Leaves
93.	<i>Symplocos racemosa</i> <sup>79</sup>	Symplocaceae	Bark
94.	<i>Trachyspermum ammi</i> Linn <sup>80</sup>	Apiaceae	Seeds
95.	<i>Trianthema portulacastrum</i> L. <sup>60</sup>	Aizoaceae	Whole Plant
96.	<i>Trichilia emetic</i> <sup>81</sup>	Meliaceae	Bark
97.	<i>Uvaria hookeri</i> <sup>82</sup>	Annonaceae	Root bark
98.	<i>Vernonia amygdalina</i> <sup>83</sup>	Asterac	Stem bark
99.	<i>Zingiber officinale</i> <sup>12</sup>	Zingiberaceae	Rhizomes

100.	<i>Ziziphus nummularia</i> <sup>6</sup>	Rhamnaceae	Bark
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## CONCLUSION

Huge numbers of the medicinal plants have been assessed for their anthelmintic exercises; a few plants still should be affirmed the proficiency and security. Different therapeutic plants were utilized from the antiquated period for the treatment of the above sicknesses however without knowing their actual mechanism and genuine compound responsible for the curing action. Be that as it may, presently, because of the headway in the examination field there were many research considers led to uncover the intensity of the plant and its compound in the treatment of the helminthic contamination/ infection. Still, additional research study is required to explore a lot of plants for the treatment and to cut back the price of the synthetic anthelmintic medication. The synthetically given medications are all the more expensive and give higher symptoms when contrasted with the characteristic medications that are acquired from the plant source were less expensive and give lesser impact on the host life form. Henceforth, further investigation must be done to investigate the plant of higher productivity and lesser side effects.

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