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A Comprehensive Review on Indian Medicinal Plants Having Antipyretic Properties

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Abstract*—Globally, the value of traditional medicine in treating health problems cannot be overestimated. About 21,000 plants registered by the World Health Organization are used medicinally around the world. Of these 2500 varieties, 150 varieties are widely used in commercial applications in India. According to the WHO, eighty percent of people in developing countries use traditional medicine. India is known as the world's botanical paradise and is the world's leading producer of medicinal plants. Plant-based medications are either utilized as healing agents or, if its main ingredient is separated through chemical processes, they are used as medications. Fever, also known pharmacologically as pyrexia and defined by an increase in body temperature above 37° C, is the most prevalent sickness. A fever is a body temperature that is higher than normal body temperature. A fundamental and essential component of many cultures and the advancement of contemporary science is the traditional usage of herbal medicine. Fever is associated with symptoms of illness behavior such as lethargy, depression, loss of appetite, drowsiness, and lack of concentration. The traditional use of herbal medicine is a very fundamental and essential part of various cultures and the spread of modern science. Medicinal plants are the only readily available medical alternatives for a large portion of our population, and traditional medicines remain part of our overall health care system. The use of Ayurvedic medicines is common in both adults and children and is increasing in many parts of the world. This review article discusses the benefits of using herbal medicine as an antipyretic agent.*

***Keywords*—** *Traditional, applications, fundamental, lethargy, alternatives*.

I. INTRODUCTION

Antipyretics are drugs that reduce fever. Fever is defined as the elevation of body temperature above the normal range. Antipyretics suppress the hypothalamus as prostaglandins raise the temperature. Then the body works to lower the temperature, thus reducing fever.[1]

Medicinal plants contain a large number of compounds that are the main source of therapeutic agents for treating human diseases. Currently, botanical research is receiving increasing attention all over the world, and much evidence has been collected showing the huge potential of medicinal plants used in various traditional systems. Plant-derived medicines are used as therapeutic agents, or their main components are separated through chemical processing and used as medicines. Ayurveda is the most widely used traditional medical system in India, although other systems such as Siddha and Unani are also used in the Indian subcontinent. Recent discoveries and advances in medicinal and aromatic plants have led to the enrichment of human medicine. There are many traditional medical systems in the world, each with different philosophies and cultural origins.

II. HERBAL DRUGS AS ANTIPYRETICS

The valuation of traditional medicine in health issues is of great importance at the global level. In India, many tribal plants such as Chirchitta, Bhringraj, Bijasar, Arjuna, Neem, and Tulsi are traditionally used to treat fever. Most Ayurvedic preparations are polyhedral and treat multiple components of a medical condition. A group of antipyretics was defined in Charak Samhita. Various medicinal plants such as neem, arjuna, ashwagandha, and tulsi are traditionally used to treat fever. This article will focus on the treatment of fever associated with herbal medicine.[2-4]

TABLE 1. List of plants having antipyretic properties

S. No.	Common Name	Botanical Name	Family	Plants part used
1	Aghata	*Achyranthes aspera*	Amarantaceae	Leaves, Seeds, Root
2	Akasbel	*Cuscuta reflexa*	Convolvulaceae	Seeds, Stem, Fruits
3	Akasbel	*Cuscuta Reflexa*	Convolvulaceae	Seeds, Stem, Fruits
4	Amla	*Emblica officinalis*	Euphorbiaceae	Fruits
5	Australian fever tree	*Eucalyptus globules*	Myrtaceae	Dried leaves, Gum, Oil
6	Bahera	*Terminalia belerica*	Combretaceae	Fruit
7	Bambo	*Bambusa vulgaris*	Graminae	Shoot, Seeds, Roots, Leaves
8	Bhindi	*Abelmoschus esculentus*	Malvaceae	Seed
9	Bhringaraj	*Eclipta erecta*	Compositae	Roots, Leaves
10	Biiter gourd	*Momordica charantia*	Cucurbitaceae	Fruits, Leaves, Seeds
11	Bish	*Aconitum ferox*	Ranunculaceae	Dried Roots
12	Brahmi	*Centella asiatica*	Umbellifera	Whole Plant
13	Butterfly Pea	*Clitoria ternatea*	Fabaceae	Root

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14	Cashew	*Anacardium occidentale*	Anacardiaceae	Fruit, Seed, Bark, Oil
15	Chickpea	*Cicer arietinum*	Leguminosae	Seeds
16	Chitravalli	*Rubia cordifolia*	Rubiaceae	Roots
17	Cinchona	*Cinchona officinalis*	Rubiaceae	Bark
18	Damanpaper	*Oldenlandia Herbacea*	Rubiaceae	Whole Herb
19	Datyuni	*Alstonia scholaris*	Apocynaceae	Leaves, Bark
20	Dhaniya	*Coriandrum sativum*	Umbelliferae	Leaves, Seeds
21	Ganja	*Cannibis sativa*	Cannabaceae	Leaves
22	Green chiretta	*Andrographis paniculata*	Acanthaceae	Leaves
23	Gulancha	*Cocculus cordifolia*	Menispermaceae	Stem, Leaves, Root
24	Gurach	*Tinospora cardifolia*	Menispermaceae	Stem, Root
25	Harar	*Terminalia chebula*	Combretaceae	Fruit
26	Harivera	*Pavonia Odorata*	Malvaceae	Roots
27	Imli	*Tamarindus indica*	Caesalpiniaceae	Fruits
28	Indian Privet	*Clerodendrum inerme*	Lamiaceae	Aerial Part
29	Indrayan	*Citrullus colocynthis*	Cucurbitaceae	Fruits, Seeds
30	Jangali Lahusan	*Allium sativum*	Liliaceae	Bulb, Oil
31	Jawasa	*Alhagi maurorum*	Papilionaceae	Seed, Oil
32	Jhar Haldi	*Coscinum fenestratum*	Menispermaceae	Stem
33	JwaranThakah	*Swertia chirata*	Gentianaceae	Whole Herb
34	Kaali Mirch	*Piper nigrum*	Piperaceae	Dried Fruits
35	Kasondi	*Cassia occidentalis*	Caesalpiniaceae	Leaves, Seeds, Root
36	Neem	*Azadirachta indica*	Meliaceae	Leaves
37	Nirgandi	*Vitex negundo*	Verbenaceae	Roots, Flower; Fruits, Bark
38	Nutgrass	*Cyperus rotundus*	Cyperaceae	Whole Plant, Volatile Oil[5-9]
39	Palwal	*Trichosanthes dioica*	Cucurbitaceae	Fruits
40	Pan	*Piper betel*	Piperaceae	Leaves
41	PhalaKantak	*Daemia extensa*	Ascepidaceae	Leaves; Roots
42	Rasaut	*Berberis aristata*	Berberidaceae	Root Bark, Stem, Wood
43	Sage	*Cordia globosa*	Boraginaceae	Fruits, Kernel, Bark
44	Sarivan	*Desmodium Gangentium*	Leguminosae	Roots, Bark
45	Satavari	*Asparagus adscendens*	Liliaceae	Tuberous Roots
46	Suganhi	*Hemidesmus indicus*	Ascepiadaceae	Roots
47	Swet Chandan	*Santalum album*	Santalaceae	Wood, Volatile oil
48	Tulsi	*Ocimum sanctum*	Labiatae	Leaves
49	Wild mint	*Lantana involucrate*	Verbenaceae	Whole Herb
50	Yellow Cedar	*Tecoma stans*	Bognoniaceae	Wood, Oil

III. CONCLUSION

It is clear from this article that medicinal plants play an important role in controlling various diseases. Various herbal plants and plant extracts have significant antipyretic properties in various animal models. This article shows that the above-mentioned medicinal plants are capable of preventing various diseases.

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