REVIEW ARTICLE

www.ijapc.com E-ISSN 2350-0204

## Ayurveda and Pharmacy finding multivarious application of indigenous herbs and medicinal plants for traditional therapy

Subha Ganguly <sup>1\*</sup>

\* AICRP on Post Harvest Technology (ICAR), Department of Fish Processing Technology, Faculty of Fishery Sciences, WEST BENGAL UNIVERSITY OF ANIMAL AND FISHERY SCIENCES, 5, Budherhat Road, P.O.- Panchasayar, Chakgaria, Kolkata, WB, India

Received: 7<sup>th</sup> September 2014/ Accepted: 31<sup>st</sup> October 2014 / Published: 10<sup>th</sup> November 2014



©International Journal of Ayurveda and Pharmaceutical Chemistry, 2014

Ganguly ganguly38@gmail.com Int J Ayu Pharm Chem Vol. 1, Issue 2, 2014

#### Abstract

The use of ayurvedic herbs is in practice in Indian traditional medicine from ancient era through ages. Worldwide research have proved medicinal herbs to possess anticancer properties and having potentiality in treatment of chronic bone ailments and systemic infections.

#### Keywords

Herbs, Medicinal plants, Health, Traditional medicine

#### **INTRODUCTION**

Ocimum sanctum, commonly known as 'tulsi' is also used in Ayurveda for various ailments including treatment of allergies. The plant has been reported to evince significant anti-stress properties. The beneficial effects of O. sanctum could therefore be due to its direct or indirect effect on the immune system. O. sanctum has been reported to modulate humoral immune response by releasing mediators for hypersensitivity reactions. [1]

# Insight on various medicinal herbs in Ayurveda

Tinospora cordifolia, commonly called 'Guduchi' has been examined for its immunomodulatory properties. Guduchi means to rejuvenate dead cells. It is widely used in veterinary folk medicine and has also been claimed to be beneficial according to 'Ayurveda' for the cure of jaundice, skin diseases, diabetes, anemia, emaciations and various infections for its anti-spasmodic, anti-inflammatory, anti-arthritic and anti-Greentree Group

allergic properties. It has also been reported that it improves the phagocytic and bactericidal activities in patients suffering from polymorphism in surgical jaundice. Kolte et al. studied the effect of feeding T. cordifolia in broiler birds which were immunosuppressed with cyclophosphamide. They had found a significant rise in antibody titer in broiler chicks against Newcastle augmentation Disease virus with of inflammatory reaction to skin contact sensitivity test. Manjrekar et al. found that aqueous extract of T. cordifolia is capable of increasing leukocyte count in mice.

Withania somnifera (commonly called 'Ashwagandha') root extracts possess antiestrogenic, adaptogenic, anti-cancer and anabolic activities having beneficial effects in the treatment of arthritis, geriatric problems and stress. The root of Asparagus racemosus (commonly called 'Satavar') possess anti-diarrheal, anti-ulcerative, antispasmodic, aphrodisiac, galactogogue and other properties and has therefore gained its importance in Ayurveda, Siddha and Unani systems of medicine. It has been observed that feeding W. somnifera and A. racemosus dried root powder significantly stimulates both humoral and cell mediated immune responses in swiss albino mice by Kuttan and Kuttan. W. somnifera and A. racemosus extracts increase phagocytic activities of macrophages in vitro. Moringa oleifera plant has tremendous pharmacological action and pharmaceutical application too. It possesses analgesic, anti-inflammatory, antipyretic, anti-asthmatic and wound healing properties. Also, it possesses anti-diabetic, anti-cancerous hepatoprotective and properties too. [1-3]

Neem oil is also used for detoxification of blood, to balance blood sugar levels, healthy hair and to improve liver function. Neem leaves have been also been used to treat skin diseases like eczema, psoriasis, etc. Neem leaf is used diseases of the heart and blood vessels (cardiovascular disease), fever, diabetes, gum disease (gingivitis), for leprosy, eye disorders. bloody nose, intestinal worms, stomach upset, loss of appetite, skin eczema, ulcers and hepatic disorders. [4] The stems of Centella are slender with creeping stolons, green to reddish-green in color, connecting plants to each other. It has long-stalked, green, reniform leaves with rounded apices which have smooth texture with palmately netted Greentree Group

veins. The leaves are borne on pericladial petioles nearly 2 cm length. Centella grows in low lying wet areas along ditches. As the plant is aquatic in habitat, it is especially sensitive to pollutants in the water. [5] Centella helps in the increase of hemoglobin in blood. It also promotes improvement in the venous system and encourages positive connective tissue growth. Neem products are popular and predominantly in demand in Ayurveda for its antibacterial, antiviral, contraceptive, anthelmintic, antifungal, antidiabetic, and sedative properties. In Ayurvedic and Unani medicine it is recommended for skin diseases. [4] Papaya is also applied topically for the treatment of cuts, rashes, stings and burns. Papain, a notable protease remains present in papaya. It is believed that it can raise platelet levels in blood. Papaya may be used as a medicine for malaria and dengue fever for its antimalarial and antiplasmodial properties. The raw papaya and its leaf are also used for meat tenderizing for the papain content in the fruit. Centella is a plant which grows in tropical swampy areas. [6]

Medicinal value of selected indigenous fruits

Coconut water is considered to be sterile unless the fruit is damaged from an external source. There have been reports of coconut water used for intravenous administration

3

where normal saline solution for medical purpose was unavailable in developing countries or on the war front. Coconut water is rich in mineral content with high potassium and anti-oxidant contents which has various medical utilities. Coconut water also contains cytokinin which is one of the beneficial components in it. Coconuts in which water to be used for drinking purpose are harvested from the coconut palms when they appear green in color. Coconuts sometimes due to natural calamities fell on the ground and they are susceptible to get damaged and get exposed for being damaged by insects or pests and animals. Coconut milk has tremendous importance especially in Ayurvedic traditional medicinal purposes. It is generally used to maintain the electrolyte balance and to rule out dehydration losses. Also, it is used for treatment of ulcers in the mouth. Some recent studies have suggested that coconut milk has anti-microbial properties in the gastrointestinal tract. hyperlipidemic balancing qualities and useful for topical applications. In addition, the coconut milk contains auric acid as saturated fat which has medicinal utilities in the cardiovascular system. [1,2]

The acidic juice of lime facilitates the lipid and alcohol absorption and neutralizes excessive bile produced by the liver. The Greentree Group juice reduces gastric acidity by counteracting with the effects of greasy food. It is, therefore, useful in the treatment of peptic ulcers. Acidic juice of the fruits acts as a curative for tonsillitis. Limes are acidic in nature and serve as rich source of vitamin C, citric acid, sugar, certain minerals like calcium and phosphorus. Fresh lime juice possesses medicinal property which is well known from ancient ages in India. It is also called as sacred fruit in the Vedas. Sharangdhara and Charaka. The latter two famous physicians of ancient India had used the lime juice for alleviating orthopedic aliments therapeutically. The vitamin C as a primary component of the lime juice increases the resistance of individuals to several diseases, helps in wound healing and increases the health of eyes. It improves the maintenance of good dentition and keeps away toothache, dental caries and swollen gums, fragility of bones and bleeding of the gums. Lime is vital in the treatment of gastric disorders like indigestion, constipation and peptic ulcer. It stops the occurrence of indigestion, burning in the chest due to high acidity in the stomach, abrupt bilious vomiting and excessive accumulation of saliva in the mouth. [1-3]

facts of the mentioned indigenous plants and fruits. In infants, use of neem oil is fatal. Some disadvantages of neem includes miscarriages, abortions and infertility.

### CONCLUSION

More sufficient researches are in demand to be carried out to establish the medicinal

Int J Ayu Pharm Chem

#### REFERENCES

- [1] Ganguly, S. Indian ayurvedic and traditional medicinal implications of indigenously available plants, herbs and fruits: A Review. *International Journal of Research in Ayurveda and Pharmacy*. 2013; 4 (4): 623-625. DOI: 10.7897/2277-4343.04435
- [2] Ganguly, S. Focus on some popular indigenous plants, herbs and fruits in traditional medicine: A Review. *World Journal of Biology and Medical Sciences*. 2014*a*; 1 (1): 1-4.
- [3] Ganguly, S. Widely available nature's gift of indigenous plants. herbs and fruits and their uses in pharmaceutical sciences and traditional medicine: An exclusive review of importance. *Analytical and Medicinal Chemistry Letters* (Pharma Research Library, Nellore, India). 2014*b*; 1 (1): xx-xx. In press.
- [4] Ganguly S. The multivarious utilities of Neem (*Azadirachta indica*) in traditional medicine: An Exclusive Review. *International Journal of Pharmacy and Natural Medicines* (Pharma Research Library, Nellore, India). 2014c; 2 (1): 134-135.
- [5] Ganguly S., Bordoloi R. *Centella asiatica*, a potential indigenous herb of potential medicinal implication in Ayurveda and clinical therapy: A Review. *International Journal* of Research in Pharmacy and Life Sciences. (Pharma Research Library, Nellore, India). 2014; 2 (1):165-166.
- [6] Ganguly S. Utility of Papaya in traditional medicine for its immense nutritional and health benefits: A Review. *Journal of Pharmaceutical and Biological Research* (Pharma Research Library, Nellore, India). 2014d; 2 (1): 88-89.

Ganguly Int J Ayu Pharm Chem Vol. 1, Issue 2, 2014 ganguly38@gmail.com