

Efficacy of Some Essential Oils to Cure Some Common Problems in Human Beings

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Abstract

Essential oils now form a part of day-to-day life of people. There are different varieties of essential oil used for fragrance and flavours. The quality and composition of these oils play an important role in determining their role in therapeutics. The present paper gives an account of the medicinal plants containing essential oils and their therapeutic properties. Different oil yielding plants were surveyed to find out the efficacy of essential oils in disease treatment.

Key words: Oil yielding plants, essential oils, therapeutic properties,

Introduction

Many developing countries are economically based on production of essential oils (Husnu, 1999). India has increased the production of a number of essential oils and the same have become more affordable, yet common man still maintains it to be the domain of the rich and the affluent. Man has shown interest in the diverse and fragrant odours associated with certain plants from the beginning of his history. The fragrance derived from plants is oily in nature and particular odour and smell of plants are due to compounds known as essential oils. A number of recent studies appear to suggest that certain essential oils may be effective in preventing the spread of the organism. Essential oils are found in all distinctly aromatic plants. These oils contain several aromatic compounds having the six-carbon ring characteristic of the benzene series and related organic groups. Some oils help in healing wounds. These oils have efficacy to cure various dermatological problem (Marwah and Marwah, 2003). Essential oils can play a crucial role in providing a solution to most of these problems created due to falling environmental condition and other related reasons.

Essential oils can prevent contagious and infections diseases (Marwah and Marwah, 2001). These oils have a calming, stimulating, pain alleviating and mood enhancing effect. They improve the functioning of internal organs, like heart, lungs etc. Till now they were on the periphery of pharmacological preparations, but now used extensively as carminatives, antiseptic, analgesics, anti-inflammatory and flavouring agents. This is because they have multiple beneficial effects than just being pain relievers (Shukla and Shukla, 1997). Essential oils have excellent therapeutic properties to cure various common problems of human beings (Chowdhury, 2003). They have very good medical properties and their constituents are beneficial for human beings (Bouillet and Goeb, 1999).

Essential oils have long been recognized because of their anti-microbial activity (Deans and Ritchie, 1987; Paster *et al.*, 1990; Reddy *et al.*, 1991; Lis-Blachin *et al.*, 1998; Smith-Palmer *et al.*, 1998; Hammer *et al.*, 1999). Due to this property, essential oils have gained much attention in investigations on their potential as alternatives to antibiotics for therapeutic purposes and applications in the cosmetics and food industry.

The present investigation was carried out to assess the efficacy of essential oils in therapeutics and in curing some common problems of human beings.

Methodology

During the present investigation various oil yielding plants were surveyed in different places during 2006-2007. Their therapeutic properties were investigated from the local medicinemen who prescribed their own herbal preparations. Relevant information on disease treatment by the plants has been collected from the elderly persons of the local community in these areas. The collected oil yielding medicinal plants were identified with the help of floras and the informations were further verified by crosschecking with the medicineman of different parts of the India together with authentic journals and books.

Results and Discussion

Essential oils are one of the most beneficial bio-product. These oils are now being used extensively to cure various dermatological and other related human diseases. In the present paper, various medicinal plants having essential oils were surveyed together with their therapeutic properties (Table-1). In addition, some of the case studies showing significance of essential oils were observed.

Table 1. Therapeutic properties of essential oils.

Therapeutic properties		Essential oils
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Anthelmintic	Against parasites worms	Bergamot, cinnamon, clove, cumin, <i>Eucalyptus</i> , lemon, mint, savory, thyme, turpentine, chenopodium
Analgesic	Pain killers	Chamomile, cinnamon, clove, <i>Eucalyptus</i> geranium, hyssop, jasmine, juniper, lavender, lemon, marigold, marjoram, melissa, mint, nutmeg, pepper, rosemary, sage, thyme, turpentine
Anti-rheumatic	Rheumatic cure	Benzoin, chamomile, camphor, <i>Cyperus</i> , hyssop, juniper, lemon, marjoram, mint, rosemary, thyme, turpentine.
Antigripe	Cold remedies	<i>Eucalyptus</i> , hyssop, juniper, lavender, pepper, pine, rosemary, basil, camphor, cedar wood, cinnamon, <i>Cyperus</i>
Bronchodilator	Cough and bronchitis treatment	Anise, basil, benzoin, bergamot, camphor, cedar wood, <i>Cyperus</i> , <i>Eucalyptus</i> , lavender, lemon, mint, pine, sandalwood.
Bio-stimulant	Stimulating life processes and improving resistance to infections, cancer protection	Geranium, hyssop, juniper, lavender, peppermint, rosemary, sage, thyme, bergamot, chamomile, cinnamon, <i>Cyperus</i> , <i>Eucalyptus</i> ,
Carminative		Anise, chamomile, cumin, fennel
Stimulant	Stimulating, energizing	Melissa, patchouly, pepper, peppermint, rosemary, sage, sandalwood, verbena, ylang-ylang, basil, bergamot, camphor, geranium, ginger, jasmine, juniper, lemon.
Antiseptic	Disinfectant	<i>Eucalyptus</i> , geranium, juniper, lavender, lemon, pepper, peppermint, pine, rose and turpentine oil, anise, chamomile, cedar wood, <i>Cyperus</i> .
Cerebroneutropic	Improving metabolism of brain and nervous system	<i>Eucalyptus</i> , juniper, lemon, mint, nutmeg, rosemary, sage, savory, thyme.
Sedative	Calming, soothing, toning, relaxing	Lemongrass, marjoram, patchouly, rose, rosemary, sandalwood, valeriana, ylang-ylang, benzoin, chamomile, cedarwood, frankincense, jasmine, lavender,

Stomachic	Digestives	Marigold, marjoram, mint, myrrh, nutmeg, pepper, rose, rosemary, sandalwood, tarragon, thyme, anise, basil, bergamot, chamomile, cinnamon, clove, coriander, cumin, <i>Cyperus</i> , dill, <i>Eucalyptus</i> , funnel, geranium, juniper, lemongrass.
Cardiac	Heart toners, circulation	Anise, benzoin, cinnamon, juniper, lavender, lemon, marigold, pepper, rose, rosemary, sage, thyme, ylang-ylang.
Hypnotic	Sleeping agents	Basil, chamomile, juniper, lavender, marjoram, neroli, rose, sandalwood, ylang-ylang.
Diuretic	Bladder and kidney remedies	Anise, camphor, cedar wood, cumin, <i>Cypress</i> , <i>Eucalyptus</i> , fennel, geranium, hyssop, juniper, lavender, lemon, pine, rosemary, sage, sandalwood, thyme, turpentine

Treatment for common problems of human beings

Case study 1:

Problem statement: The patient suffered from seborrheic dermatitis and hyperactive sebaceous glands due to which the facial skin was inflamed with small rashes and large acne.

Treatment: It was clear that the skin had to be cleansed, exfoliated and dried before aromatherapy oils could work to heal the skin and the scalp. Thereafter, lavender oil was used for treatment. The effectiveness of the oil was increased by generating heat on the facial skin by using ultrasound machine. The results were positive.

Case study 2:

Problem statement: The patient suffered for past seven years with acute dermatitis on palms during winter months. She had been using steroidal creams for relief. The palms had become so sensitive that they would bleed and emit tremendous heat.

Treatment: She was treated with six applications of super-critically extracted sandalwood oil and the palms healed miraculously.

Case study 3:

Problem statement: The patient suffered with fungal infection on the skin for past fifteen years. The infection began with a small patch and gradually the infected area increased.

Treatment: He was treated with full extracted sandalwood and lavender oil alternately. The results were satisfactory.

Case study 4:

Problem statement: The patient suffered from a nervous breakdown and consequently had to be put on strong doses of medication. This made her weak and forgetful with loss of confidence.

Treatment: She was treated with aromatic oils, mainly chamomile, and the Ayurvedic technique of *Shirodhara* was practiced on her. Four sittings brought significant change in the patient's attitude.

Case study 5:

Problem Statement: The female patient aged twenty-six suffered from irritable skin along the nasolabial fold together with dull hair and dull skin. Reoccurrence of the problem was seen on trying a number of skin treatments. Moreover, scalp never showed signs of infection as scales adhered to the scalp without being shed.

Treatment: She was given the hair treatment and then appeared strips of scaly skin due to which the facial skin erupted badly. The face was then left untouched and the hair was treated for several months with a formulation of basil, palmarosa and Jatamansi in black sesame oil. The scalp soothed out in 6 months. The face was restored to a normal condition, and the hair bounced back to its crowing glory.

Case study 6:

Problem statement: The patient suffered from eczema like condition with a patch of skin due to an insect bite over a period of 15 years. The patch flared up suddenly improve for a short periods of time.

Treatment: The patient was treated with SCFE extracted sandalwood oil and lavender oil alternately. Positive results were obtained.

Case study 7:

Problem statement: Thirty patients suffered from Acne vulgaris Acne affects the forehead, cheeks, chin and 'beard area'.

Treatment: All these cases of acne vulgaris were treated with a large amount of success with the above mentioned treatments being done to prepare the skin to benefit from the application of a very valued oil of Ganga Tulsi and lavender.

Case study 8:

Problem statement: A female patient aged twenty-four years had profuse hair fall for eight months. The hair was thin on the vertex and needed washing every second day. Moreover, she had acne on face and body, microscopic examination revealed innumerable numbers of micro-bacillus and occasional bottle-bacillus.

Treatment: She was treated with strong antiseptic lotions at the start followed with rejuvenating massage with a formulation containing lavender, all spice and turmeric in Badam (almond) oil. Due to acne, deep cleansing was done regularly with every hair treatment. The treatment was continued for 5 months with effective results.

Case study 9:

Problem statement: Ten patients suffered from viral warts, which are transmitted by direct contact.

Treatment: The patients were treated with cauterization and advised to clear the area with a scurb and loofah. Orange and Ajwain oil were given for application. Nine cases did not have re-occurrence of warts. The tenth case did not follow the instructions given and returned after four months with a number of warts, all around the neck. She had also been advised to remove her chain at night, which she failed to do.

Case study 10:

Problem statement: The patient suffered from contact dermatitis on the finger pads of both the hands.

Treatment: He was treated with six applications of super critically extracted sandalwood oil and there was miraculous healing of palm.

Above studies clearly reveals that essential oils have great potential to cure skin and other human ailments. Different case studies given, proves the immense significance of these oils in therapeutics. Still, many of the traditional practices need scientific validation through detailed researches. Finally the paper asses the degree of awareness about essential oils among the common man.

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References

- Bouillet X, Goeb P (1999). Medical properties of essential oils and their constituents. *Essential oils Beyond 2000*, Mussoorie.
- Chowdhury AR (2003). Indigenous production of essential oils. *Proceedings NIMMAP, CIMAP*, Lucknow, pp 71-76.
- Husnu CBK (1999). Future Prospects of Essential Oil and Related Natural Products in Developing Countries in context of World Demand and Supply. *Fragrance and Flavours in the 21st Century*, Jaipur.
- Marwah J, Marwah S (2001). Essential oils in the prevention of contagious and infectious diseases. *Proceedings IWSA National meets Agarkar Institute, Pune*, pp 185-187.
- Marwah J, Marwah S (2003). Common men and essential oils. *Proceedings NIMMAP, CIMAP*, Lucknow, pp 275-277.
- Shukla S, Shukla B (1997). Aromatherapy in India: Yesterday and tomorrow. *Proceedings South Asia Countries Seminar on Medicinal Plants*, Patna.
- Deans SG, Ritchie G (1987). Antibacterial properties of plant essential oils. *Int. J. Food Microbiol.* 5: 165-180.
- Paster N, Juven BJ, Shaaya E, Menasherov M, Nitzan R, Weisslowicz H, Ravid U (1990). Inhibitory effect of oregano and thyme essential oils on moulds and foodborne bacteria. *Letters in Applied Microbiology* 11: 33-37.
- Reddy GBS, Melkhani AB, Kalyani GA, Rao JV, Shirwaikar A, Kotian M, Ramani R, Aithal KS, Udupa AL, Bhat G, Srinivasan KK (1991). Chemical and pharmacological investigations of *Limnophila conferta* and *Limnophila heterophylla*. *Int. J. Pharmacognosy* 29: 145-153.
- Lis-Blachin M, Buchbauer G, Hirtenlehner T, Resch M (1998). Antimicrobial activity of Pelargonium essential oils added to a quiche filling as a model food system. *Letters in Appl. Microbiol.* 27: 207- 210.
- Smith-Palmer A, Stewart J, Fyfe L (1998). Antimicrobial properties of plant essential oils and essences against five important food-borne pathogens. *Letters in Applied Microbiology* 26: 118-122.
- Hammer KA, Carson CF, Riley TV (1999). Antimicrobial activity of essential oils and other plants extracts. *J. Appl. Microbiol.* 86: 985-990.