

# Hand Book on Neem & Allied Products

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Nature has blessed man with a number of wonders. Of all, plants are found to be its best boon. Among them, neem is distinguished by their astonishing versatility. Neem is such a fascinating tree that no other tree probably has provided wide range of benefits to mankind. Neem tree and its products have been reputed since long for some physiological activity and have been used quite extensively as a household remedy, since time immemorial, for the treatment of some of the common ailments. The Neem tree, which is also known as Margosa or Indian lilac is grown extensively in Asian and African countries. The neem is very useful tree due to its medicinal and insecticidal properties. Neem oil is the major product of neem seed industry. The chief limitation of the oil is its odour due to the presence of odouriferous substances and other non saponifiable components. Amongst the non edible oilseeds the potential availability of neem is by far the largest because of its very extensive growth throughout the country and fairly good yield of oils from the seeds. Neem seed cake is the major by product of neem seed oil. Various parts of the neem tree have been used as traditional Ayurvedic medicine in India. Almost every product of this invaluable tree has been largely employed for medical purposes. Neem works as blood purifier. Consuming raw neem leaves or neem leaf powder helps in eradicating toxins from the blood. This is one of the greatest benefits of neem tree. Azadirachtin in the neem products have been found to act as repellents, antifeedants, affect food consumption and utilization and interfere with the growth regulation and ovarian development in insects. Neem manufacturing products are in high demand and several manufacturing companies are readily in business trying to satisfy their natural product consuming and environment sensitive market. Along with a good natural resource management program, Neem can be an income generator and a sustainable medicinal alternative in developing countries.

Some of the fundamentals of the book are technology for production of insecticides of plant origin at rural level, neem seed cake as a source of pests control chemicals, neem oil as possible biorational insecticide, chemistry of neem (*azadirachta indica*), a sustainable source of natural pesticides, machineries for neem processing, engineering properties of neem nut, neem and transfer of technology, processing of neem fruit and seed, processing of neem oil and its utilization, uses of neem is indigenous system of medicine, cold processing of neem seed, products from neem, development of a neem formulation and its evaluation for control of crop pests, evaluation of nematicidal potential in neem, etc.

The book covers cultivation of neem and processing of its products. It will be of immense value to all concerned with manufacturing of neem products; consultants Institutions or those who want to diversify in to production of neem based products.

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