

## CD Review

**Organic Cultivation of Rice – Seed and Harvest.** CDs produced by Centre for Indian Knowledge Systems, 30 Gandhi Mandapam Road, Kotturpuram, Chennai 600 085.

Perhaps no other crop plant is cultivated more widely in the world than rice. Rice is cultivated in more than 113 countries and provides for livelihoods of nearly 250 million people. It is the staple food for over half of the world's population and provides 27% of the dietary energy supply and 20% of the dietary protein intake in the developing world. India is the second largest producer of rice in the world after China and is a staple food of 65% of the Indian population. Rice accounts for nearly 46 and 42% of the cereal and total food grain production respectively, in India. Along with the other staple crop wheat, rice has been one of the few crops that have contributed to the staggering intensification of agricultural practices, including the use of artificial fertilizers and pesticides and more recently in the use of genetically modified (GM) crops. With the intensification unlikely to abate due to increased demand by a growing population, there has been an increasing concern of the impacts, including loss of soil fertility, diminishing soil biodiversity and of course, the lack of sustainability in the entire process. Challenged by these concerns there have been attempts, world over, to develop alternate methods of farming which are environment-friendly and economically feasible. In the context of poor farmers from India and other developing countries, sustainable and organic agriculture methods based on locally-available resources, could contribute to agricultural production without causing further environmental damage.

Of late, due to a greater awareness among the public, the market for organically produced foods is on the rise. In India, organic farming was practised on only about 4800 ha in 2003 with a net export value of Rs 89 crores. This accounts for only 0.8% of the current global organic produce market. Some of the major organically produced agricultural crops in India include plantation crops, spices, pulses, fruits, vegetables and oil seeds (www.fao.org). In recent years, increased interest in organic farm-

ing methods has been evidenced by both farmers and the government. A number of research institutions, NGOs and other bodies have helped promote sustainable methods of farming.

The Centre for Indian Knowledge System (CIKS) at Chennai, has recently developed a film series on the 'Organic Cultivation of Rice'. This is a timely and welcome contribution to not only the farming community, but also for all those interested in agriculture at large. The CD compiles information on the traditional organic cultivation methods used by farmers based on several years of research and interaction with farming communities.

The first film in the series provides an overview of organic rice cultivation from sowing to harvest. It provides in detail the step-wise process involving seed selection, nursery, planting, pest attack and harvest. At every step, the authors encourage the use of locally available materials in and around the farms. For example, *Pongamia* and neem, which are the source of green manure and bio-pesticides respectively, are encouraged to be used at one or the other stage during farming. The second film provides details of organic soil enrichment using plant and animal products such as cow dung, legume plants, etc. Several methods of composting, including farm composting, vermicompost and heap compost have been dealt in detail.

The third film deals with the management of common pests of paddy. The most commonly used vegetables such as garlic, green chilies and ginger are shown to be effective in controlling several pests of paddy. The simple rope technique for the effective control of lepidopteran pests such as skipper has been elegantly demonstrated. The fourth and final film highlights the important diseases affecting paddy and their control measures.

The total duration of these four films is 110 minutes in English and 99 minutes in Tamil. These films are available in both DVD and VCD formats and reasonably priced at Rs 250. Considering the extent of information presented on the indigenous knowledge and organic cultivation of rice, the CDs form an invaluable contribution. However, like any product, there is some scope for improvement to make it even more valuable to users. With a little more editing, redundant and repetitive information could be avoided. Further, some sharp editing

can make the CD crisper and shorter (75 minutes). The small booklet issued with the CD is well produced and provides a snippet of the information contained in the CD. But these comments should not detract the good job done by CIKS. I only wish that CIKS produces the CD in other local languages.

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**Annual Review of Genomics and Human Genetics 2005.** Aravinda Chakravarti and Eric Green (eds). Annual Reviews, 4139 El Camino Way, Palo Alto, CA 94303, USA. Vol. 6. 462 pp. Price not mentioned.

The *Annual Review of Genomics and Human Genetics 2005* edition covers a wide range of topics relating to genetics of various human diseases and behaviour, X-chromosome inactivation in mammals, human evolution and natural variation in human genes and genomic archeology and genomic prospecting of wild cats.

At the beginning, Alfred Kudson gives a personal account of the last 60 years of the 'Golden Age' in genetics and medicine. His review deals with the discovery of retinoblastoma as a tumour suppressor gene and as a key regulator of the cell cycle.

Libby *et al.* address the issues of endogenous genetic susceptibility and multifactorial complexity glaucoma. The review emphasizes upon the importance of genetic factors affecting susceptibility to intraocular pressure elevation and those affecting retinal ganglion cells and optic nerve susceptibility in glaucoma pathogenesis. Mutations in various genes contributing to primary open-angle glaucoma, developmental glaucoma and pigmentary glaucoma are described. The authors suggest that large-scale epidemiologic studies in conjunction with new sophisticated data analysis techniques for complex genetic and environmental interactions could help in deciphering the complex interactions that underlie human glau-