

National Chemical Laboratory

(Council of Scientific & Industrial Research)

Dr. Homi Bhabha Road, Pune – 411 008, India



Publication and Science Communication Unit

Press release 14 August 2008

Increased shelf life of Neera

National Chemical Laboratory (NCL), Pune has developed a process for improving the shelf life of Neera, a traditional rural drink derived from the sap of the Palmyra, sago or date palm. These palms account for more than 35% of the 170 million palms in India. More than 70% of these palms are not tapped.

Neera, a nutritious drink, has a shelf life of a few hours. Hence it is consumed within a limited radius of the point of production in the coastal regions. Unless Neera is stored under chilled conditions, it changes to toddy when bacteria and yeast ferment the Neera within a few hours of its collection. A membrane filtration technique developed at NCL removes the microorganisms present in Neera without affecting its nutritive quality, thus extending the shelf life up to 45 days under conditions of refrigeration (4 - 8°C).

NCL has set up a Pilot Plant at the Gajanan Naik Multi-Disciplinary Training Centre, (GNMDTC) of Khadi and Village Industry Commission (KVIC), Dahanu in Thane District of Maharashtra. The plant has the capacity to process up to 500 litres of Neera per day and was commissioned on 3rd May 2008. About 1500 pouches per day, each having a volume of 200 ml are packed and distributed at KVIC retail outlets in Dahanu. The product is well received and represents a new approach to improving a traditional rural drink by infusing appropriate technology.

Another Pilot Plant with NCL's knowhow was commissioned on 14th May 2008 by The Gujarat Neera Federation (GNF) with assistance from Department of Biotechnology (DBT), New Delhi and KVIC (under their Scheme of fund for regeneration of traditional industries - SFURTI cluster programme) to process up to 3000 liters of Neera per day. Neera has been successfully launched in 20 liter containers and efforts are under way to scale-up the capacity to 10,000 liters per day.

Membrane processing of Neera has resulted in an overall 15-20% saving in product, which would otherwise go to waste due to its poor shelf life. A major portion of this saving will benefit the Neera tappers by way of increased wages. The GNF estimates that the existing Neera processing plant will create additional 1200 jobs in the forthcoming season. This technology will also benefit at least 14 more KVIC centres spread all over the country.

Analyses carried out at NCL and SNDT University, Mumbai (who is collaborator in the project under a DBT umbrella program) confirm that Neera is a highly nutritious drink and can be consumed by young children and expecting mothers.





Neera filtration plant installed at the site of Gujarat Neera Federation, Saronda

Neera filtration facility at GNMDTC, Dahanu

Notes to Editor:

National Chemical Laboratory (NCL) (www.ncl-india.org), Pune, India is a research, development and consulting organisation with a focus on chemistry and chemical engineering. It has a successful record of research partnership with industry. National Chemical Laboratory (NCL) is a flagship laboratory of the Council of Scientific & Industrial Research) which is the largest network of publicly funded research institutes in India.