

In this issue

Anammox

The pungent alkaline gas, ammonia, is a by-product of degradation of biological waste that can cause pollution in air or water. Shivaraman and Shivaraman (**page 1507**) describe a process of anaerobic oxidation that converts ammonium ion to free nitrogen. The reaction is attributed to the metabolic activities of anammox bacteria belonging to the planctomycete group. The process promises to be a low-cost alternative for pollution abatement.

Analysing DNA sequences

2-D graphical representations are useful for analysing coarse structural peculiarities based on the primary sequence of the DNA. Ghosh *et al.* (**page 1534**) analyse a part of the human genome to locate the coding regions on the chromosome. First described in 1994, their method is being successfully used to quickly sort the information available from the whole genome sequences.

Biotransformation

Bamboo plants, a conventional source of income in the rural Indian economy, are usually viewed as a raw material for the low cost biotechnology. Sarangthem and Singh (**page 1544**) report the use of succulent bamboo shoots for microbial biotransformation. The authors take slice portions of the succulent shoot, and add *Bacillus* species to obtain fermentation products. The fermented preparation is for identifica-

tion of phytosterol which is eventually characterized with the help of IR and mass spectra.



Badnavirus

Badnavirus is isolated for the first time from another commercially important crop black pepper (*Piper nigrum*). The virus can be transmitted by grafting, by mealybugs, and by mechanical means albeit at a low efficiency. Serological studies identify relatives of the badnavirus isolate, though exact taxonomic classification awaits further characterization. Bhat *et al.* (**page 1547**) describe the salient features of the virus and its infected host.

Oligophiles

Oligophiles are often unculturable in laboratory conditions since their rela-

tive presence is easily masked by the copious presence of copiotrophs that require relatively higher concentrations of nutrients to thrive. Pramanik *et al.* (**page 1550**) collected several soil samples from Leh (Ladakh) in Kashmir and isolated oligophiles by taking special care in culturing the uncultivable.

Asymptotic model

In a dry tropical forest, Sagar *et al.* (**page 1555**) employ two asymptotic models to predict the features of biodiversity and conclude that a log-linear model better fits the data than a power function model.

Vitamin D receptor

Vitamin D receptor gene polymorphisms as generated by restriction enzymes such as *TaqI*, *BsmI*, *ApaI*, and *FokI*, are correlated with the infection of pulmonary tuberculosis in the Indian population. Similar correlations are known in case of tuberculoïd leprosy and lepromatous leprosy prevalent among the north-Indian population. Selvaraj *et al.* (**page 1564**) report the putative homozygous and heterozygous alleles of vitamin D receptor genes that are variously associated with susceptibility, immunity and relapse of mycobacterial tuberculosis in a South Indian population living around Chennai.

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