active tracer technique has conclusively proved that the exchange of food between laballed individual and unlabelled one takes place quite rapidly. Various types of solicitation of the donor by the solicitor have been described and the mechanism discussed. A few dominant groups of termites often maintain a distinct territory for foraging and other activities. Relationships of termites and fungi may be mutualistic, attractant, repellent, toxic, etc. These have been discussed in the light of the role of fungi in the ecological homeostasis. Attractive fungi and toxic baits are effective tools for eco-management of termites. Inquiline termites are not capable of building their own ecoclimate and therefore share the same with other species of termites, leading to better survival value.

Physiology of caste determination and digestion have been discussed at length. In the lower termites JH secreted by *Corpora allata* is the regulating factor in differentiation of various castes. CA is activated to produce differential titre of JH by various factors which seem to be mediated by the activation of specific genes. In the higher termites, caste differentiation seems to be blastogenic. However, juvenoids are capable of transforming workers into soldiers even when topically applied. JH factor thus seems to be common to both the lower and the higher termites, other differences notwithstanding. It has been proved almost conclusively that the enzyme cellulase is secreted by the termites themselves, salivary gland being a major source. In fungus growing termites, enzymes of spherules of *Termitomyces* assist in digestion of various food components and these acquired digestive enzymes are important physiological homeostatic factors. The intestinal microbiota not only assist in the digestion of hemicellulose groups but also produce methane, synthesize free amino acids and fix atmospheric N_2. Lignin is degraded either by lignase or by oxidation, producing humic acid as a by-product.

Termite society is indeed supraorganismic where each caste functions like one or a group of organs in multicellular animals. This concept finds ample support from the homeostatic mechanisms as discussed above.

NEWS

ROYAL SWEDISH ACADEMY OF SCIENCES GOLD MEDAL

Dr Paul S. Teng, IRRI Plant Pathologist, was awarded the Sixth Eriksson Gold Medal and Prize on 1 August 1987 during the closing ceremony of the XIV International Botanical Congress in West Berlin, Germany. The award is one of the most prestigious in the science of plant pathology. It is sponsored by the Jakob Eriksson Prize Fund and the Royal Swedish Academy of Sciences.

The gold medal is awarded every 5 years to "a candidate of distinction . . . for his research in mycology, in plant pathology, or in virus diseases, or for a particular publication . . . with the understanding that the work being so recognised is of distinct international value of merit". Teng was recognised for his research in epidemiology and crop loss assessment.