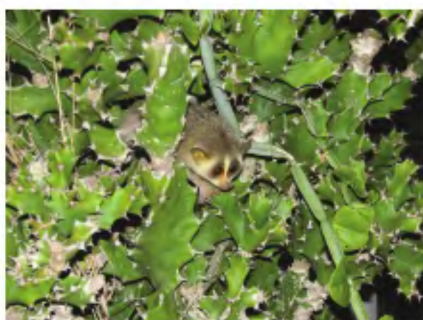


In this issue

Slender loris of southern India

One of two nocturnal primates in our country, the slender loris of southern India is an unusual animal in many respects. Far removed from the universal perception of a 'monkey' in its morphology and behaviour, this ancestral species has been around longer than any of us can imagine,



yet few biologists can even furnish basic information about its distribution and behaviour. Forest management plans rarely even mention the species, let alone actively promote its conservation. Yet, this 'riddle' of an animal has unobtrusively clung on to the last bits of forest cover that endure in the country, not only near human settlements that border wildlife sanctuaries but even in the green spaces of an urban metropolis like

Bangalore. Radhakrishna and Kumara (**page 1226**) report, for the first time, behavioural variation in the Mysore slender loris. The authors suggest that this ability to adapt to various ecological habitats could be the key to the species continued presence in degraded and disturbed habitats across the country.

Biochar in agriculture-prospects and related implications

Sequestration of atmospheric carbon to the soil is a challenging task for the scientific community to mitigate rising concentration of atmospheric CO₂. The application of biochar to the soil is proposed as a novel approach to establish a significant, long-term sink for atmospheric CO₂ in terrestrial ecosystems. The term 'biochar' denotes black carbon formed by the pyrolysis of biomass, i.e. by heating biomass under oxygen-free or stress environment, so that it does not completely combust. The stability of biomass-derived black carbon or biochar as a slow cycling pool in the global carbon cycle is an important property and is likely governed by environmental condition.

Because of its macromolecular structure dominated by aromatic carbon, biochar is more recalcitrant to microbial decomposition than uncharred organic matter. Biochar is an excellent soil amendment for sequestering carbon, water retention as well as providing habitat for microbes. It is reported that black carbon can produce significant benefits when applied to agricultural soils in combination with some fertilizers. Increase in crop yield to the tune of 45–250% has been reported by application of biochar along with chemical fertilizers. Biochar application reduced CO₂ respiration, nitrous oxide and methane production, and decreased dissipation rate of herbicide in soil. Biochar could be the panacea for mitigating the increasing CO₂ concentration in environment provided its rate of application and mechanism of action are fully understood. There is a need to monitor the changes in physical, chemical, hydrological and ecological settings of soil under the long-term application of biochar. Furthermore, there is need to ascertain the response of different crops to biochar application under the different agro-ecological regions. See **page 1218**.