In this issue

Flora of India

Towards comprehensive coverage

India is one among the 18 mega-diverse countries in the world and shares four biodiversity hotspots with adjoining countries. The rich flora of the Indian subcontinent was published in seven volumes under the Flora of British India between 1872 and 1897. A comprehensive flora exclusive for the country was felt necessary by the Botanical Survey of India and till now 10 of the proposed 32 volumes have been completed. The article deliberates on issues confronting botanists in surveying unexplored and underexplored areas and other hurdles in the publication of a comprehensive and quality flora. The lapses in new species reporting and constraints to access authenticated materials have been detailed.

Potharaju Venu from the Environment Protection Training and Research Institute, Hyderabad, and Munivenkatappa Sanjappa from the University of Agricultural Sciences, Bengaluru make an impassioned plea for quality and comprehensive flora. They suggest an integrated approach to overcome administrative obstacles, material limitations and expertise availability. The authors argue for more exposure of our taxonomists to outside trainings and multilateral collaborations in its completion. See the details in the General Article on **page 1299** in this issue.

Rural and Urban Waste

Recycle to NPK + SOC

Though NPK fertilisers have helped increase agricultural productivity in the short term, scientists have noted a decline in the productivity of the land in the long term. Slow depletion of micronutrients from soil on the one hand, and burning of agricultural wastes leading to depletion of soil organic carbon that is necessary for healthy soil microflora on the other, have started impacting rural and agricultural economy.

At the same time, the amounts of kitchen waste from urban homes, fruit and vegetable wastes from processing industries and markets have surged beyond manageable limits causing environmental and public health concerns.

In a Review Article on **page 1314** in this issue, researchers from the ICAR-Indian Institute of Soil Science, Bhopal show how one problem can solve another. Crop residue, animal excreta, fruit and vegetable wastes can help us create a remedy to stall soil-organic carbon depletion and stem the ebb in agricultural productivity, they say.

They survey the scenario of waste production (read resource availability) in the states of Central and Western India and present data that show that the deployment of available technologies can bring down the dependence on chemical fertilisers. The potential reduction in fertiliser subsidies may convince decision makers to allocate resources to improve the productivity of the soils by managing wastes scientifically.

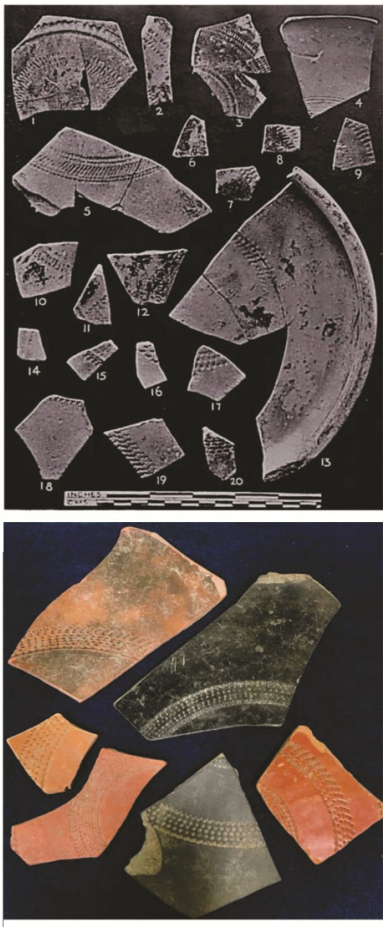
Ancient Roman Mariners

On the Odisha coast?

From July to September when the South-West Monsoon sends a breeze from the north-eastern parts of Africa to India, Romans would set sail to India. And when the North-West monsoon starts in October, they rode the winds back, taking spices, ivory and such, that had a market there.

This back and forth has led to a littering of Roman artefacts along the west coast and southern parts of India. Shards of different kinds of pottery, coins, etc. are often discovered by archaeologists today to enable the reconstruction of history and the cultural transmigrations of the past.

The recent discovery of such artefacts in Odisha led to a belief that the Romans had perhaps landed there too. However, on **page 1391** in this issue, Sila Tripati and Rudra Prasad Behera from the CSIR-National Institute of Oceanography, Goa refute this view.



Rouletted ware collected from Sisupalgarh, Odisha (Top) and Alagankulam, Tamil Nadu (Bottom).

First, the meagre amounts of artefacts found in Odisha could be brought from elsewhere, perhaps from the southern parts of India. Second, some of these artefacts are found to be fake. And third, the monsoon winds would not have been favourable for ships to sail as far north as Odisha.

Read the Research Communication for more details.

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