



DATABASES

Gathering Organelle Genomes

Chloroplasts and mitochondria are houseguests that never left. The descendants of bacteria that moved into eukaryotic cells more than a billion years ago, these organelles—which capture sunlight and turn food into energy—still have their own genomes. Visitors to Organelle Genome Resources, sponsored by the National Center for Biotechnology Information, can search complete genome sequences in NCBI's GenBank—a growing list that now stands at 218 mitochondria and 21 chloroplasts.

Taxonomic coverage emphasizes animals but also includes plants, fungi, and protists, as well as all the model organisms. Besides genome sequences, you can also access annotated chromosome maps, protein sequences, and PubMed links to the original publications. Other links lead to more organelle databases, such as Emory University's Mitomap collection of human mitochondrial DNA mutations and polymorphisms.

www.ncbi.nlm.nih.gov/PMGifs/Genomes/organelles.html

NET NEWS

Indian Internet Plan Kaput

A stalled plan to build a state-of-the-art Internet in India appears to have fallen apart with a decision last month by its U.S. partner, Carnegie Mellon University (CMU) in Pittsburgh, to pull out.

India's Department of Telecommunications (DOT) signed an agreement 3 years ago with a CMU spin-off company, IUNet, to set up and split roughly 50/50 the cost of the \$250 million high-speed network. Called Sankhya Vahini, it would have linked over 100 research institutions as well as businesses at multigigabit speeds using fiber-optic cable already laid (*Science*, 4 February 2000, p. 763). The Indian Cabinet approved the deal in January 2000.

But the plan never got moving in India, and in a 17 October letter to the Indian prime minister, CMU professors V. S. Arunachalam and Raj Reddy say they have "decided to abandon" the project.



Giuseppe Pesce of the University of L'Aquila in Italy. Though still under construction, the site already offers a checklist of Italian copepods as well as reviews of some of the groups of copepods that inhabit groundwater.

RESOURCES

Meet Some Cosmopolitan Crustaceans

You might find one of the crustaceans known as copepods living high in the Himalayas, munching on the gills of a fish, or basking in a steaming thermal pool. Huge numbers of them swarm the ocean and fresh waters, and their fans like to point out that there may be more copepods than insects on Earth. Researchers looking for more information on these ubiquitous creatures, such as the colorful *Oncaea venusta* (left), should try this pair of Web sites.

The most impressive resource at the Smithsonian's World of Copepods is a complete bibliography with some 39,000 references dating back to 1600. You can also search a list of all known copepod scientific names or scour the database of 5000 type specimens held by the museum. There's also a worldwide directory of copepod researchers. The Copepods Web Portal[†] is a new community site from zoologist

[†] www.nmnh.si.edu/iz/copepod
copepods.interfree.it/index.html

NETWATCH

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The letter cites the DOT's failure to sanction the network and to deal with a public lawsuit claiming it wouldn't be secure. CMU had spent \$1 million to design the network and was "ready to roll," says Arunachalam. Indian officials say the government will proceed anyway, but observers in the country are skeptical.

EDUCATION

Eavesdropping on the Universe

Have you ever listened to a star—one with real gravity? Drop by this site from the Jodrell Bank Observatory to hear the sounds of a pulsar, a rapidly spinning neutron star that gives off a signal as regular as a metronome. Located near the British city of Manchester, Jodrell Bank has been a mecca for astronomers since the 1940s. Besides reading about the history of the facility and current research, site visitors can check out tutorials on topics such as pulsars. Or read up on supernovas and the use of gravitational lensing—the bending of light from distant objects by the gravity of closer objects—to gauge the expansion of the universe.

www.jb.man.ac.uk

