

Air to stay? Brown haze settles on many parts of Asia, including densely populated cities such as Kuala Lumpur.



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Brown haze darkens outlook for climate across Asia

Nairobi As India experiences one of its driest monsoon seasons for decades (see page 713), a study has suggested that atmospheric pollution is likely to make such droughts more common in some parts of Asia.

The report by the United Nations Environment Programme focuses on aerosols — small smoke particles from cars, industry and vegetation fires that create a thick brown layer of haze over some of Asia's most densely populated regions. The haze reflects sunlight, cooling and drying the areas it covers, which could decrease monsoon rain in some areas of central Asia by up to 40%, the authors say, while increasing rainfall in the southeast of the continent. The report also shows that the haze spreads further than was originally thought, reaching beyond populated areas.

The study is based on data from the Indian Ocean Experiment, an international effort involving scientists from Europe, India and the United States. But researchers say that they are a long way from understanding the effect of aerosols on global climate. Little is known about how aerosols affect climate variables such as cloud formation and global wind patterns, making it hard to factor them into climate models. These issues will be discussed next month at an international conference on aerosols in Taipei, Taiwan.

♦ www.unep.org

French fusion reactor maintains record hot streak

Paris A fusion reactor in France has kept hot plasma stable for three-and-a-half minutes, almost twice as long as the previous record set in 1996 at the same reactor. Prolonging the stability of such plasmas is a key element in developing a commercial fusion reactor.

The doughnut-shaped Tore Supra reactor at the French Atomic Energy Commission's research centre in Cadarache, near Aix en

Provence, uses an electrical current, rather than fusion, to heat the plasma. The record was achieved by funnelling away excess energy through carbon tiles on the machine's floor.

Although the plasma was too cool to produce fusion energy, the results should help researchers to design larger fusion reactors that can hold plasma for longer periods. The know-how gained at Tore Supra will also feed into plans for ITER, the proposed international project to build an experimental magnetic fusion reactor.

Couple accused of lab theft return to work

San Diego A married couple accused of stealing scientific secrets from Harvard University have returned to their posts at Californian research institutes.

Jiangyu 'Jonathan' Zhu, a Chinese citizen, and his Japanese wife, Kayoko Kimbara, were arrested in San Diego in June. Federal officials allege that the pair took reagents and genetic clones from a Harvard molecular-biology lab where they worked in 1999, and sent them to a Japanese drug firm. The couple are currently on bail.

Internal reviews have now been conducted at the University of California, San Diego, where Zhu holds a postdoctoral position, and at the Scripps Research Institute in La Jolla, where Kimbara has a state-funded fellowship. Officials say that the investigations found no evidence of impropriety by the couple. Both are now back at work, although university officials say that Zhu will not be allowed to take part in laboratory studies.

Transgenic cotton gets mothballed after protests

New Delhi India's decision to embrace some transgenic crops suffered a blow last week when the government in the southern state of Karnataka banned the sale of genetically modified seeds. Protests by farmers in the area had culminated in the burning of fields of transgenic *Bt* cotton in the Davangere district, prompting the government to issue its ban on 10 August.

The *Bt* cotton contains a gene for a toxin from the bacterium *Bacillus thuringiensis*, which allows it to resist attack from its main pest, the bollworm. It is the first transgenic crop to be given a commercial licence in India. Permission to plant it was granted by the national government in March (see *Nature* 416, 468; 2002).

Activists say that transgenic crops will damage the genetic diversity of India's crops. The protesters, which include the Karnataka State Farmers' Association, also want a transgenics research unit run by biotechnology firm Monsanto removed from the Indian Institute of Science campus in Bangalore.

Lawsuit sounds the alarm over Navy sonar

Washington A powerful new underwater sonar system proposed by the US Navy would endanger whales and other animals and should be made illegal, according to a lawsuit filed last week by a coalition of environmental groups.

The National Marine Fisheries Service approved the use of the system in July, despite last December's admission by the Navy that use of a similar sonar system resulted in the death of at least six whales when it was tested in 2000 (see *Nature* 415, 106; 2002). The Navy says the new system operates at lower frequencies than the one that caused the deaths, and that sonar is needed to detect new ultra-quiet submarines that are currently under development.

The New York-based Natural Resources Defense Council, which leads the environmental coalition, insists that such a system will physically maim whales, dolphins and other sea life, and disturb their feeding, mating and migratory patterns.

♦ www.nrdc.org

Bones hint at dinosaur king's princely relative

Chicago Palaeontologists have debated whether *Tyrannosaurus rex* had a smaller cousin for over half a century. Now a find by a team from a small US museum may help to settle the issue.

The dispute began with the discovery of a tyrannosaur-like skull in Montana in the 1940s. Some palaeontologists argue that certain distinctive features of the skull, such as its finely serrated teeth, distinguish it as a unique genus, dubbed *Nanotyrannus*. Others say the skull is actually from a juvenile *T. rex*.

The new find, unearthed in Montana last month by a team from the Burpee Museum of Natural History in Rockford, Illinois, and named Jane after a museum sponsor, could resolve the question. The discoverers believe that the fossil is not a young *T. rex* because it has fused vertebrae, which are only seen in adult dinosaurs. But they say they need to free the skeleton from the ground to be sure.



Digging the king? Palaeontologists are split on whether this is *Tyrannosaurus rex* or a relative.

BURPEE MUSEUM OF NATURAL HISTORY