

Nasal Attraction

Women have sharper noses than men do, but now researchers have found the first exception. Men are better at detecting bourgeonal, a flowery compound used in perfumes.

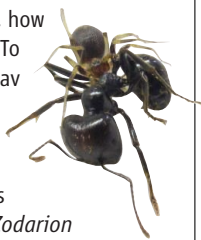
Biologists Peter Olsson and Matthias Laska of Linköping University in Sweden recruited 500 participants, half of them male, to sniff increasingly concentrated solutions of bourgeonal and two control odors. Men's threshold for bourgeonal was on average 13 parts per billion, whereas women needed twice this concentration to notice the distinctive lily-of-the-valley fragrance, the pair reported online 8 April in *Chemical Senses*. This makes bourgeonal "the first odorant ever for which human males are more sensitive than females," says Laska.

It's not just men: Sperm cells make a beeline toward sources of bourgeonal in lab experiments, although scientists don't know if it's the very chemical that attracts sperm to the egg (*Science*, 28 March 2003, p. 2054). Because the olfactory receptors on sperm cells are also expressed in the human nose, and selective pressure for keener receptors would act on men but not on women, it makes sense that men are more sensitive to the sperm attractant, Laska says.

But Tim Jacob, a psychophysicologist at Cardiff University in the United Kingdom, points out that the gender difference is still very small and wonders why men should be more sensitive to bourgeonal. After all, he says, it's sperm cells, not men, that sniff their way to the egg.

Balanced Breakfast

When you eat only one thing, how do you get a balanced meal? To find out, arachnologist Stanislav Pekár of Masaryk University in Brno, Czech Republic, and colleagues fed ants of different sizes to three groups of 16 exclusively ant-eating *Zodarion rubidum* spiders. Spiders dined equally on the bulbous, lipid-rich rears and protein-rich foreparts of smaller ants, but they preferred the upper body when fed larger ants, the team reported online 15 April in *Animal Behaviour*. When given a feast, spiders save more room for the most nutritious platter, the authors suggest.



Now for Sale: Oldest Paperweights

Where are those *Consumer Reports* people when you need them? Prospector and mine worker Mark Brown of Yellowknife in the far north of Canada has got a deal for you: a fist-size chunk of the planet's oldest known rock for just \$149.99 (Canadian), \$249.99 with a nifty pyramidal display case. Brown has a claim on a remote island in the Acasta River, 300 kilometers north of Yellowknife, that contains gneiss that formed 4.03 billion years ago, little more than half a billion years after Earth did. "Not what I would say is the flashiest of rocks," says Brown in his 10-minute promotional video (<http://rockofagesnwt.com/>), "but I find it very, very inspiring."

But geochronologist Samuel Bowring of the Massachusetts Institute of Technology in Cambridge, who dated the famed Acasta gneiss with colleagues, warns that similar-looking rock at the site is hundreds of millions of years younger. Brown "has no way of guaranteeing" that his samples are in fact the oldest rock, Bowring says. Aside from that, the offering doesn't really bother him. "If selling that rock exposes a bunch of people to the fact that Earth is 4.6 billion years old, it's a good thing."



Healing The Spirit

As head of psychiatry at Mbarara University of Science and Technology in Uganda, Marjolein van Duijl didn't get many requests for Prozac. "There's no translation for 'depression' in the local languages," the Dutch psychiatrist says. But patients at her clinic or in rural villages she visited complained of disturbing trances in which they spoke in strange voices, clawed the air, and trembled. Patients blamed bewitchment or spirits of dead relatives, angered by unobserved rituals.

To dig deeper, van Duijl asked 80 local healers to identify 119 patients suffering from spirit possession. She used a dissociation questionnaire to check for symptoms, such as losing spans of time or feeling disconnected, often linked to trauma in Western patients.

She also used trauma questionnaires to check for experiences such as going without food or witnessing a murder.

Compared with 71 healthy controls from the same villages, possessed patients scored much higher on both types of questionnaires. And, as in Western patients, dissociation and trauma were highly correlated, she and colleagues reported online 17 April in *Culture, Medicine, and Psychiatry*.

The study is "unique" in "linking the traditional state to Western measures of trauma and dissociation," says psychiatrist Roberto Lewis-Fernández of Columbia University. Identifying how mental suffering is expressed in a patient's culture is essential to treatment, he says.

Van Duijl, now at the Clinic for Refugees at Centrum 45 in Oegstgeest, the Netherlands, says she doesn't mind when patients seek relief in rituals with traditional healers. "If you make some space for what the patients think is helpful, you can help them in a better way."



A gathering of Ugandan traditional healers.