

News in Brief

Potted Plants Improve Office Workers' Health



Potted plants in offices can improve the health of stressed-out workers and reduce the number of sick days they take, a study suggests. According to Telegraph, research carried out by the Agricultural University of Norway has added to the body of evidence suggesting that plants in the working environment have a beneficial health effect.

Tina Bringslimark, an expert in environmental psychology, looked at 305 office workers in three offices with differing amounts of greenery. "We investigated the amount of self-reported sick leave there was and compared it with the amount of plants they could see from their desk. The more plants they could see, then the less self-reported sick leave there was."

"Possibly the most straightforward is that plants and the microbes in the soil are good at removing volatile, organic compounds that can affect health. There could also be a psychological explanation in that people believe plants are healthier and are likely to evaluate their own health more optimistically," said Prof Grete Patil, of the university.

Depressed Dads Affect Kids' Speech Development



Fathers get the baby blues too and, if they do, it can be bad news for their children's language development. Two-year-olds have a smaller vocabulary if their fathers have depression than if their mothers do.

Postnatal depression in women is widely recognized and linked to emotional and behavioral difficulties in their children. Less well known is that some men also become depressed soon after a child is born, NewScientist said.

To explore the effects of paternal depression, a team led by paediatric psychologist James Paulson at the Eastern Virginia Medical School in Norfolk surveyed about 5,000 families enrolled in the Early Childhood Longitudinal Study. When the children were 9 months old, 14 percent of the mothers and 10 percent of the fathers were clinically depressed—about twice the rates in the general population. The surprise came when the researchers looked at whether this affected what proportion of 50 common words the children were using at 2 years of age. On average, the kids used 29.

Broken Bones Lethal to Horses



After a four-race winning streak, Eight Belles galloped past the Kentucky Derby's finish line to snag second place. The glory was shattered as the racehorse collapsed on the track. She had broken bones in both front ankles - a lethal injury for a horse.

Immobility can cut off vital circulation within a horse's body, leading to a cascade of health compromises, LiveScience reported.

"When [Eight Belles] switched leads to her right front, apparently she landed awkwardly under fatigue, and that was the initiating problem," said equine veterinarian Celeste Kunz, a spokesperson for the American Association of Equine Practitioners.

Kunz is referring to the rhythm of a horse's gallop: First the right hind-hoof hits the ground, followed by the left hind-hoof, then the left fore-hoof and right fore-hoof. The right front leg in this instance is the "lead," and after this hoof touches down there is a moment when the horse is suspended with all four legs in the air.

The injury to the right leg caused the horse to transfer more weight to the left leg, which overloaded the left leg bones. Eight Belles' shattered ankles were ill-equipped to support her standing weight. "A horse's hoof is designed like a passive mechanical pump," John Hermanson, a zoologist who studies horses at Cornell University in New York said. "Every time they take a step, it provides a little assist in driving blood back to the heart."

Same Difference



This week's deadly Cyclone Nargis, which hit the Southeast Asian nation of Myanmar (also known as Burma) is no different from a typhoon or a hurricane.

They're all just different names for the same basic weather phenomenon, LiveScience wrote. Named cyclones, typhoons and hurricanes are all powerful, spinning storms collectively called tropical cyclones, which form over warm tropical waters and reach sustained internal wind speeds of 74 mph.

Hurricanes start in the Atlantic, Caribbean and northeast Pacific, while typhoons form in the western Pacific and southeastern Indian Ocean. If one of these monsters develops in certain parts of the Indian Ocean or part of the southwest Pacific Ocean, it goes by one of three variations of the generic term cyclone.

Typhoons and hurricanes and cyclones all rotate in the same direction, counterclockwise, if they form in the Northern Hemisphere.

Bluetooth Allows Spies Into Your Life

Worried about your civil liberties and privacy? Then it may come as a shock to discover that you have unwittingly been allowing your phone to signal your every move.

Bluetooth, a wireless link built into many cell phones, makes our movements trackable by anyone equipped with a PC and an appropriate receiver. Vassilis Kostakos at the University of Bath in the UK placed four Bluetooth receivers in the city's center, NewScientist said.

Over four months, his team tracked 10,000 Bluetooth phones and was able to "capture and analyze people's encounters" in pubs, streets and shops.

Bluetooth is now more of a privacy threat than the more frequently publicized radio-frequency identification (RFID) chips, Kostakos says. "If people are worried, they should turn off the Bluetooth function on their mobile phones."



Treatment Slashes Baby HIV Risk

Appropriate treatment can all but eradicate the risk that a pregnant woman with HIV will pass the virus to her child, research shows.

According to BBC, University College London led the Aids Online study. The researchers said it was the first time such low rates of infection had been observed at a population level.

Most HIV-positive women in the UK now take a combination of antiretroviral therapy (ART) drugs during pregnancy.

A caesarean section delivery reduces the risk of infection to the child—but the latest study showed that in many cases the drugs are so effective that a normal delivery is possible.

Transmission rates for women on ART for at least the last 14 days of pregnancy were 0.8 percent—regardless of the type of delivery.

The researchers said the key to success was that most women in the UK and Ireland now accepted antenatal testing for HIV.

The authors found that under 10 percent of pregnant women with HIV in these countries had access to the drugs. As a result, they calculated, about 1,800 babies were born with HIV each day because their mothers did not get the drugs they need.

Lead researcher Claire Townsend said that for women with access to drugs, the findings were "greatly encouraging".

Grapefruit Inhibits Hepatitis C Virus



Researchers tested the grapefruit flavonoid naringenin and found it reduced HCV secretion in infected cells by 80 percent.

The grapefruit flavonoid naringenin inhibits the secretion of Hepatitis C virus (HCV) in infected cells and could offer a new approach for treating the disease, according to a Harvard Medical School study.

About 3 percent of the global population are infected with HCV, which can lead to cirrhosis and liver cancer. The current standard therapy of interferon and ribavirin is only effective in about 50 percent of cases and can cause major side effects, according to background information in the study, HealthDay reported.

Recent research suggests that HCV may be "hitching a ride" along the lipoprotein life cycle, and that compounds and dietary supplements that influence lipoprotein metabolism may also affect HCV.

In this new study, researchers demonstrated that HCV is actively secreted by infected cells while bound to a very low-density lipoprotein.

"Silencing apolipoprotein B (Apo-B) mRNA in infected cells causes a 70-percent reduction in the secretion of both ApoB-100 and HCV.

This ApoB-dependent HCV secretion pathway suggests a novel therapeutic approach for the treatment of HCV infection," the researchers wrote.

They then tested the grapefruit flavonoid naringenin and found it reduced HCV secretion in infected cells by 80 percent.

"The concept of supplementing HCV patients' diets with naringenin is appealing," the researchers wrote. But they noted the intestinal wall doesn't absorb naringenin well, which means therapeutic doses of the flavonoid would have to be given by injection or combined with other compounds to boost its absorption by the intestines.

The researchers also noted that naringenin and several other compounds in grapefruit have significant drug-drug interactions.

"Future studies would focus on long-term ability of naringenin and perhaps other citrus flavonoids to reduce viral load in animal models and long-term cultures of primary human hepatocytes," the researchers concluded.