

DANGERS OF EARLY MORNING WATERING

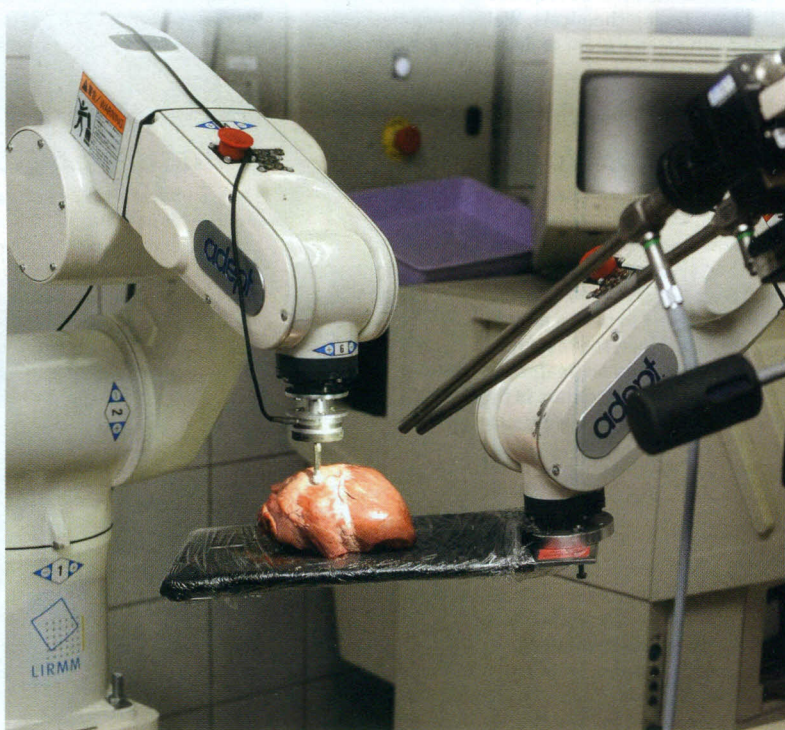
Gardeners have long advised against watering plants in the midday sun, as it can lead to them being burned. But a new study by a Hungarian biophysicist suggests they're only half right. Dr Gabor Horvath from Eotvos University used computer modelling to look at how the angle of contact between a water droplet and a leaf affects the light on the plant. He found that while there is some such effect on some types of leaves, "The chance of leafburn would be highest in the morning or afternoon, rather than at high solar elevations such as midday." The team found the burns were most likely to occur at a solar angle of 23°, which corresponds to early morning or late afternoon.

Surgery on a beating heart

Operating on a moving, beating heart has always been a tricky business. In fact, surgeons often have to stop it in its tracks before getting to work – which is a very risky procedure. But a team of French researchers have developed a 3D computer model of a beating heart that replicates its movements in minute detail. This means a

robotic arm linked to the software can move in perfect harmony with the organ, allowing the surgeon to work as if it were still.

The model, developed at the University of Montpellier, has yet to be tested on patients – here it's being tried out on a replica of a heart. But it's hoped it could greatly lower the risks of heart ops.



NEWS IN BRIEF

Britain should become a major player in the world's space industry says the Space Innovation and Growth Team, a Government-created group tasked with mapping out a vision for the next 20 years. It's suggesting to ministers that the UK should develop an array of satellites that do everything from monitoring war zones to tracking construction projects. The plan would involve the Government spending £550m – double the current sum – by 2020.

If you use the password '123456', you're not alone. Data security firm Imperva has found it's the most commonly used password. 'Password' is the fourth most common and 'iloveyou' comes in at number five. The survey was made possible by a security breach at Rockyou.com, a developer of social network services. A hacker posted 32 million passwords from the company's database on the internet.

A crash helmet is essential safety gear for motorcyclists, but it could be damaging their hearing. Researchers say that riding at 70mph can generate noise levels above 104dB – about the same as a pneumatic drill. The issue isn't simply engine noise – much of the sound is generated by airflow over the rider's protective headgear. Scientists at the University of Bath and Bath Spa University are investigating how the sound is transmitted to the rider's ear, so that better helmets can be designed in future.



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