THE STRAITS TIMES, 1 DEC 2017, PAGE B12

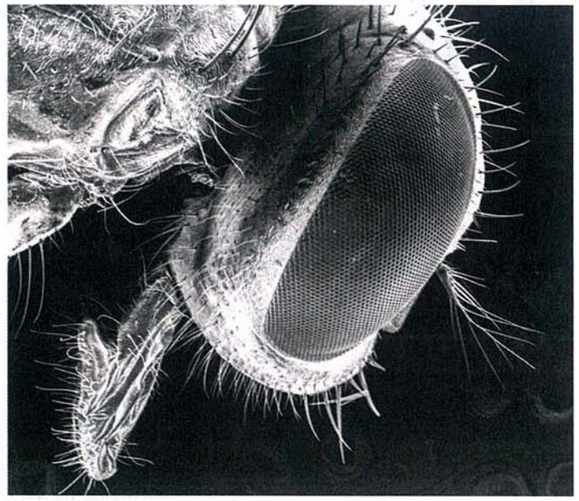
SCIENCE

THE BEAUTY OF FLIES

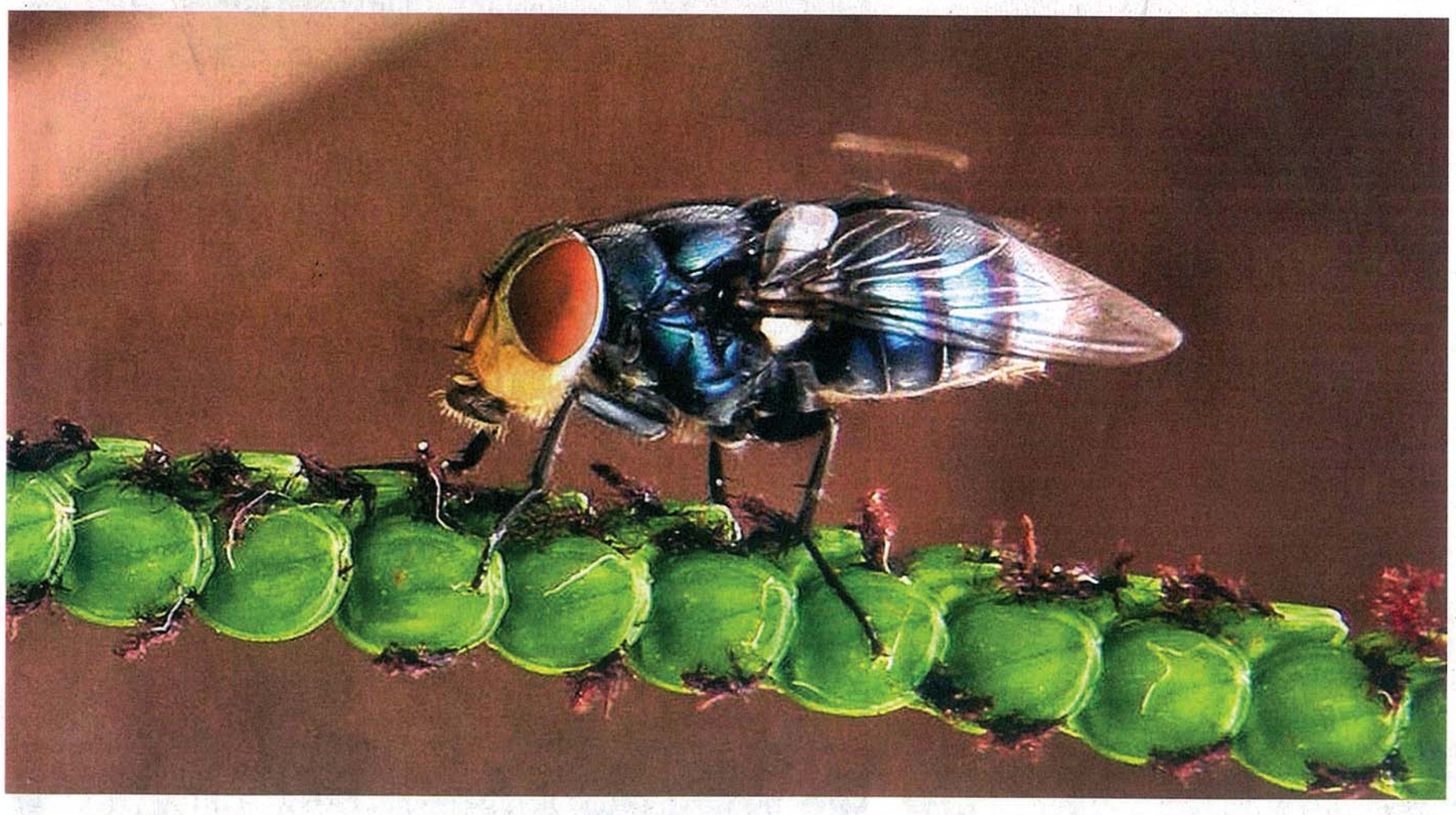
Flies are vessels that transport hundreds of harmful and sometimes deadly bacteria, carrying them mostly on their legs and wings. Research led by Nanyang Technological University's Professor Stephan Schuster has found that they even carry the pathogen Helicobacter pylori, which causes stomach ulcers in humans and is the most common risk factor for gastric cancer. Through the lens, though, Prof Schuster has also captured the beauty of these insects.



A photo of a blowfly taken using a system called photo stacking, where the photographer moved the very shallow field of depth along the body axes of the insect and then combined up to 24 images in the computer, while only retaining the parts that are properly focused.



Close up photo, taken by a sequential electron microscope, of a housefly's bristles which are effective in carrying bacteria colonies. PHOTOS: PROF STEPHAN SCHUSTER, NTU; ANA JUNQUEIRA



TRICKY SHOT

It takes an elaborate set of lenses, such as macro lenses, in combination with additional magnifiers and a remote flash system. The only way of stopping flies from moving is to cool them down or photograph dead ones.

PROFESSOR STEPHAN SCHUSTER, a research director at the Singapore Centre for Environmental Life Sciences Engineering, Nanyang Technological University.

A blowfly can carry hundreds of bacteria species wherever it goes and spreads these bacteria on surfaces.