

# Science update

## Recent news from the world of science

David Burges

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### Evolution 'in the soup'

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**T**HE BIBLE is clear that all life, both natural and spiritual, originates from God the Creator. He is described as having "the fountain of life" (Ps. 36:9), and possesses "life in Himself" (Jno. 5:26). As the greatest of His works, He took inanimate materials, "the dust of the ground", to create man, and "breathed into his nostrils the breath of life" (Gen. 2:7).

The evolutionist, who denies any involvement of a supernatural Creator, must seek for a plausible explanation of how those inanimate materials could have first formed themselves, by chance, into living cells, the basic constituents of life. But of all the many flaws in the theory of evolution, the greatest is undoubtedly the origin-of-life problem. The gap between basic chemical molecules and the amazing complexity of the 'simplest' living cell is immense. One leading textbook begins its account of the evolution of the first cell with the admission, "The large *gaps* in our knowledge can be filled only by *speculations* that are likely to be *wrong* in many details. But there is enough evidence from fossils and studies of present day organisms to allow us to make *intelligent guesses* about the major stages in the evolution of life" (italics added).<sup>1</sup>

Darwin himself suggested hopefully that life might have originated in "a warm little pond". It was shown in the 1950s by Stanley Miller that many of the simple molecules which are the building blocks of life, such as amino acids, are readily synthesised when mixtures of gases are heated with water in the presence of electrical discharges, forming a so-called 'prebiotic soup'. This work has become the basis of all the "intelligent guesses" about the origin of life. A major difficulty, however, is that, although the amino acids are formed in the *presence* of water, they will only join together to form larger molecules such as proteins in the *absence* of water. So a scenario was dreamed up in which life began in a hot volcanic pool, where the larger molecules were able to form around the hot, dry edges!

Now, however, experiments carried out by researchers from the University of California,

using "hot puddles" in volcanic regions of Russia and the USA, have proved to be "surprising and disappointing".<sup>2</sup> It seems that hot acidic waters containing clay do not provide the right conditions for such reactions to occur. This is significant because it had been proposed that the surfaces of clays would be ideal places for reactions to take place, but it seems that actually the organic compounds are so tightly bound to the clay particles that they cannot react at all!<sup>3</sup>

Evolutionists, of course, will be undismayed by this negative result. Their faith system demands a naturalistic explanation for every aspect of life, including its origin. Life is here, so it must have begun by itself somehow, no matter how impossible it is to explain. But this result is just one more demonstration of how impossible it is that life should begin just by accident. And so it is said of the originator of life, "He That sitteth in the heavens shall laugh: the Lord shall have them in derision" (Ps. 2:4).

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### Another 'living fossil'

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**E**VERY few years a species that has been declared 'extinct' by scientists is discovered flourishing in the wild. Well-known cases include the deep sea fish, the coelacanth; the New Zealand reptile, the tuatara; and the Wollemi pine from Australia.<sup>4</sup>

The latest example is of a squirrel-like rodent, the Laotian rock rat, discovered in 2005 at a hunters' market in Laos, southeast Asia. The animal has never been seen in the wild by biologists, even though the local hunters are clearly well aware of its haunts. Although declared to be a new species, detailed search through the fossil records at the Natural History Museum in London revealed that the mammal is the sole survivor (unless others are

1. Alberts *et al.*, *Molecular Biology of the Cell*, 1983 edition, p. 4.
2. "Darwin's warm pond theory tested", BBC On-Line News, Science section, 13 Feb. 2006.
3. This was noted in *New Scientist*, 17 Feb. 2006, p. 7, in a small inside item; no banner headline!
4. "Discovery of another 'living fossil'", *The Testimony*, Jun. 1998, p. 241.

found) of an ancient group of rodents, supposed to have died out eleven million years ago.

Evolutionists like to give the impression of certainty over their descriptions of the classification of fossils, and especially the dating of their ages. Yet the whole scheme of geological epochs is constructed in accordance with the hypothetical evolutionary descent of species and dated accordingly. Those dates are not confirmed by radioactive dating, as is commonly supposed, because that method can only be used for primary, igneous rocks and not for the sedimentary strata where fossils are found.<sup>5</sup> In other words, in reality the rocks are dated from the fossils, and the fossils from the rocks!

The repeated discovery of such 'extinct' species still living actually demonstrates the remarkable fixity and durability of species, as expressed in the Bible by the phrase, "after his [or its, or their] kind" (Gen. 1:11,12,21,24), and calls in question the whole evolutionary sequence and its time scales.

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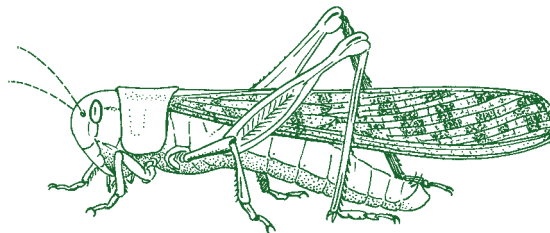
## Insect hearing

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**B**EING able to hear the smallest of noises is a matter of life or death for most insects, and many species have extremely sophisticated and complex hearing systems. These are now being intensively studied by a number of research teams seeking to understand how insect ears can be so sensitive.

A team at the University of Bristol is exploring the workings of the remarkable 'ears' of the desert locust, a creature well known in the Bible.<sup>6</sup> They are formed from a membrane, two millimetres across and about a hundred times thinner than a human hair. The thickness of the membrane varies at different points, and this affects how it responds to sounds. Unlike a human ear, which uses microscopic hairs in the cochlea to respond to sound waves of different frequencies, the locust 'eardrum' responds to them directly on different regions of the membrane, activating hundreds of receptors behind it. It is thus able not only to receive sound but also to analyse it at the same time.

The same group is also studying mosquitoes, which hear through their antennae, each containing around 15,000 sensory cells, as many as in the human ear. They have found that, just like humans, mosquitoes have the capacity for active hearing, meaning that they can generate their own vibrations to amplify incoming sounds and



**The Desert Locust. A locust's ears are positioned on its body just at the base of the back legs.**

improve the sensitivity of their hearing. They are able to stop this positive feedback when sounds create enough vibration on their own, but how the mosquito achieves this is poorly understood. Measurements have shown that the mosquito's auditory system is one of the most sensitive so far found in any animal.

It is hoped that this work could lead to the development of improved hearing aids and new microphones able to capture and analyse extremely faint sounds, but initial attempts have met with little success. It is striking that teams of scientists equipped with all the latest technology should find it so difficult to replicate what a lowly insect can accomplish with no conscious thought. Yet all of this marvellous complexity is attributed merely to time and chance. "Locusts . . . have had at least 250 million years of evolution to work on it", said the lead scientist, even though locusts are clearly incapable of *working* on their hearing at all, and chance could never produce anything as wonderful. The word 'evolution' is used as a magic wand to represent a mythical process that has never been observed and cannot be described in detail.

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## Jet-propelled bacteria

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**A**NOTHER example of exquisite design on the microscopic scale comes from work by scientists at the University of Connecticut, studying a class of single-celled organisms known as myxobacteria. These filament-shaped bacteria are able to glide along surfaces, leaving a trail of slime in their wake. It seemed clear that the slime

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5. Richard Milton, *Shattering the Myth of Darwinism*, US edition, 1997, pp. 20-22.

6. Report in the *Mail on Sunday*, 2 Apr. 2006, kindly submitted by a reader.

acted as a lubricant, but this did not explain how they were able to move along.

Now it has been discovered that they eject the fluid from minute nozzles located in their cell walls.<sup>7</sup> Myxobacteria have 250 such nozzles located at each end, and can move forward or back by squirting the slime from one end or the other. The key component of the slime is a polysaccharide, a chain of molecules produced by a polymerisation process within the nozzles. When it is produced slowly it oozes out without producing motion, but when the rate is increased it shoots out, propelling the bacteria along.

It is amazing to realise that bacteria have no brain or nervous system to control their activities, yet these 'simple' single-celled organisms display such extraordinary complexity of behaviour. In recent years microbiologists have begun to study how bacteria actually communicate with each other, using chemical sensors. For instance, harmful bacteria pose no threat when present just in small numbers; it is only when the number of

bacteria reaches a sufficient level that signal substances emitted by them act on receptors to cause them to combine and attack their host, a system known as quorum sensing. Again it seems beyond credulity that such complex chemical systems could simply appear by chance, no matter how many millions of years are invoked.

There seems to be no limit to the ability attributed by scientists to natural selection to design complex biochemical systems and structures to enable life to flourish. But in truth, all of these wonders are rightly attributable to the mind of the Supreme Creator and are the witnesses of His awe-inspiring handiwork. For, in the words of Solomon, "He hath made every thing beautiful in His time: also He hath set the world in their heart, so that no man can find out the work that God maketh from the beginning to the end" (Eccl. 3:11).

7. "Slime jets the key to bug propulsion", *New Scientist*, 1 Apr. 2006, p. 15.

## Your Letters



### How long is a generation?

I would like to thank Brother Pete Mercer for his interesting article of the above title (May 2006, p. 171). I have always held the view that a generation must be seventy years, as this is how man's allotted life span is described in Psalm 90:10—"The days of our years"—a psalm all about periods of time, and which incorporates the plea, "Return, O LORD, how long?" (v. 13). The Father knows how we long to discover the time when His beloved Son will be here on earth. I also thoroughly agree with Brother Mercer's point about twenty being the age of responsibility, and thus the age of those who were old enough to understand when the fig tree first put forth its leaves.

Incidentally, I think seventy years was a fitting time period for the nation to have endured the Babylonian exile, as it is the governmental number of ten multiplied by the spiritual number of seven.

However, considering the momentous events that befell Israel in 1967, I think we should be

looking at the year 2017, as the next Jubilee year, and possibly the year when the Heir returns "unto his possession" (Lev. 25:13,28,41). This will be seventy years from the date of the UN decision on the partition of Palestine. But let us not assume we can sit back and wait for the next eleven years. Considering what mighty work Christ and his saints will be involved in immediately after his return, the year 2017 could be the culmination of all this, and his glorious re-appearing upon the earth could be very much sooner.

Even so, come, Lord Jesus!

Liz Robinson  
Watford

The article by Brother Pete Mercer was very interesting indeed, and left the impression, I believe, that the year 2018 is to be a very significant year. I feel an important point that ought be made is that Luke 21:32 actually states, "This generation shall not pass away", which to my mind clearly implies that we need not have a completed time period of a generation, but that the events referred