Disclosure

of things evolutionists don't want you to know

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Darwin's "Abominable Mystery"

Evolutionists are still mystified by angiosperm evolution.

One of the editors of the journal, *Science*, introduced an article on flowering plants (angiosperms) and pollinating insects with these words:

> More than 150 years ago, Charles Darwin was amazed by the explosion of angiosperms, flowering and fruit-bearing plants, in the fossil record: Four major families emerged in the span of just 10 million years, a mere 10 million years after the first flowering plant fossil appeared. Now, scientists are using DNA analysis of modern flowers—and their pollinators—to solve Darwin's "abominable mystery" of when flowering plants emerged and diversified, researchers write in *Science*. Watch the video to find out where Darwin's mystery stands well over 100 years later. [1]

The 3½-minute video is at https://youtu.be/Dh3lfEoEuXM. It briefly describes how the genetic (DNA) analysis of when flowers and insects evolved disagrees with the fossil evidence. The conclusion of the video is, "It's still complicated."

The introduction to the article itself sets the problem out very clearly.

> For more than a century there has been a fascination with the surprisingly rapid rise and early diversity of flowering plants (angiosperms). Darwin described the seemingly explosive diversification of angiosperms as an "abominable mystery," and debates continue about the origin and processes driving angiosperm speciation. Dating the origin of angiosperms was traditionally the prerogative of paleobotanists who read the fossil record of plants, but with DNA sequencing becoming increasingly sophisticated, molecular dating methods have come to the table. Many angiosperm fossils can be dated to the Early Cretaceous (~135 million years ago), which has led paleobotanists to reason that they originated during that era. It is now increasingly recognized that angiosperms are probably older than the oldest fossils, but how much older remains controversial. When angiosperms originated is key to understanding the origin and evolution of pollinators, particularly insects such as bees, butterflies, moths, and flies.
>
> Recent reports highlight the disparity of molecular and paleontological time scales and draw conflicting conclusions about the timing of angiosperm diversification (see the figure). [2]

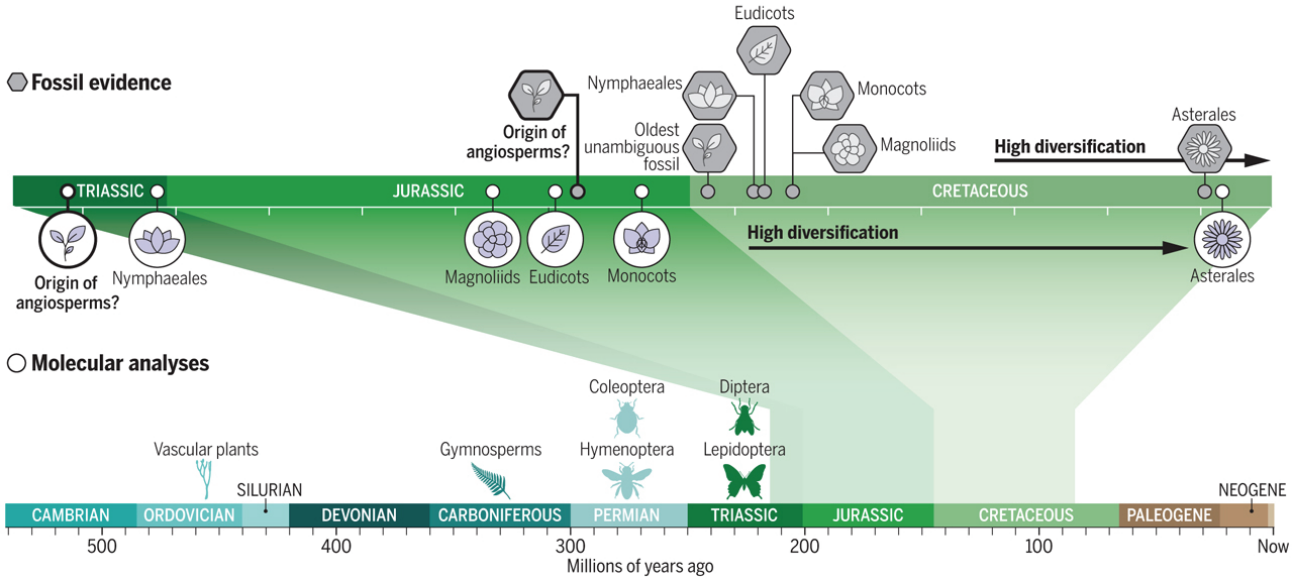
The figure in question is reproduced at the top of the next page. It shows how the fossil dates disagree with the genetic dates for the origin of the various species of flowers. It requires some explanation, which we are happy to provide!

[1] Meagan Cantwell, *Science*, 30 June, 2020, "Can scientists solve Darwin's 'abominable mystery' about the angiosperm explosion?", https://www.sciencemag.org/news/2020/06/can-scientists-solve-darwins-abominable-mystery-about-angiosperm-explosion

[2] Casper J. van der Kooi and Jeff Ollerton, *Science*, 19 June, 2020, "The origins of flowering plants and pollinators", pp. 1306-1308, https://science.sciencemag.org/content/368/6497/1306.full

Evolution of angiosperms according to molecular and fossil evidence

Fossil and molecular evidence lead to conflicting conclusions about the timing of the origin of flowering plants. Fossil evidence suggests that flowering plants arose near the beginning of the Cretaceous, but molecular analyses date the origin much earlier, in the Triassic.



The images inside the hexagons along the top of the timeline represent the dates inferred from the fossil record. The images inside the circles just below the timeline represent the dates inferred from DNA (molecular) analysis.

The molecular analysis puts the origin of angiosperms about 70 million years before the earliest accepted angiosperm fossils.

Furthermore, the sequence of evolution in the fossil record is Eudicots, Monocots, Magnoliids. The sequence of evolution by genetic analysis is Magnoliids, Eudicots, Monocots.

How DNA Analysis Works (or not)

Suppose there are two similar flowers, called Flower 1 and Flower 2. How did the first individuals of their species originate? There are three possibilities.

The first possibility is that they were made independently by an intelligent agent who used a common design, and modified it slightly on purpose to create two slightly different kinds of living things. That's called, "creation," which is simply an unacceptable conclusion unworthy of consideration. ☺

The second possibility is that Flower 2 evolved from Flower 1. Although worthy of consideration, that possibility must also be rejected because that's not how evolution works. Evolution happens through "survival of the fittest." The more fit species drives the less fit species to extinction. Since Flower 1 and Flower 2 still exist, Flower 2 could not have evolved from Flower 1. The evolutionists' answer to a naïve creationist's question, "If man evolved from apes, why are there still apes?" is that man didn't evolve from an ape. Man evolved from an unknown common ancestor of apes and humans, which was driven to extinction by apes and humans.

The third possibility is that Flower 1 and Flower 2 evolved from an unknown common ancestor, Flower 0, which is now extinct. All the genes that Flower 1 and Flower 2 have in common must have been inherited from Flower 0. The different genes must be the product of random mutations filtered by natural selection. The longer the time from when Flower 1 and Flower 2 evolved from Flower 0, and drove Flower 0 to extinction, the more differences there will be. Every genetic difference between Flower 0 and Flower 1 represents a "missing link" between Flower 0 and Flower 1 which has gone extinct. Every genetic difference between Flower 0 and Flower 2 also represents a missing link. There are innumerable missing links which must have existed but went extinct without leaving a trace in the fossil record.

Since the first two possibilities must be rejected, the third possibility must be true, despite all the missing intermediates because an obviously flawed explanation is better than no explanation at all. ☺

Which is More Accurate?

Molecular analysis seems much more scientific than making up stories about fossils

based on similar appearance. The number of similar genes and the number of genetic differences can be objectively quantified. There's no subjective guesswork. Numbers don't lie. Just count the number of genetic differences, multiply by the rate at which mutations cause genetic differences, and you have an accurate measure of when species evolved (they say).

One might think the genetic analysis is clearly more accurate than the fossil record because the earliest discovered fossil of a species probably isn't the earliest one that ever lived.

> The absence of evidence is no evidence of absence, and it is known that the fossil record can be incomplete or biased because some taxa may be less likely to fossilize. [3]

The fossil record is simply unreliable because it is so incomplete and biased. But wait! The genetic analysis is calibrated based on the fossil record! For example, evolutionists "know" from the fossil record when humans and apes evolved from an unknown common ancestor. Knowing the number of genetic differences between apes and humans, and the time since they split, one can use simple division to determine the mutation rate. ☺

The evolutionists' quandary is that they can't claim that the fossil dates aren't as accurate as the genetic dates because the inaccurate fossil dates were used to calibrate the genetic analysis. Which analysis should you believe?

> Both paleontological records and molecular analyses have their strengths and weaknesses. The strength of fossils is that they can provide information on past form, function, and clade richness, and indirectly provide information on speciation and extinction. Fossils are particularly useful when they harbor intermediate structures or combinations of characters that no longer exist, which can provide insightful examples that help to reconstruct the course of evolutionary events. However, the interpretation of fossils can be subjective and controversial, because important features of these plants may not be preserved and often must be inferred from two-dimensional compressed remains. [4]

On the other hand,

> Molecular analyses are built on hard-to-estimate variables, such as the distribution of mutation rates across taxa and time. Variation in divergence times—which inevitably occurs in datasets with many species—frequently leads to overestimation of age. Indeed, molecular analyses often push origin dates back in time, including the older lineages, but whether this is a methodological error remains unclear. [5]

The Buds and the Bees

This brings us to the question of how it is that flowers and insect pollinators evolved at the same time (or not).

Geologists say, "The present is the key to the past." In other words, erosion, sedimentation, volcanic eruptions, and so on, happen now, and they happened in the past. There is no geologic process that happens now that didn't happen in the past, and vice versa.

Biologists aren't quite as certain about that as geologists are. Mutation rates tend to be a little bit squishy when they don't produce acceptable conclusions. Mutation rate is one of the "hard-to-estimate variables" mentioned by the article authors. The best estimate is the one that produces the best (most desirable) result.

Presently, some insects need flowers for food, and some flowers need insects for pollination. If the present is the key to the past, it is reasonable to assume that has always been the case. Therefore, certain flowers and certain insects had to have evolved at the same time.

The bottom of the diagram of angiosperm evolution shows when butterflies supposedly evolved. They are right under the pictures of the flowers at the top of the diagram, which might mislead you to believe they evolved at the same time—but I don't think this was intentional deception. It was probably an unfortunate accident of how the diagram was laid out.

The top is an expansion of the right-hand portion of the bottom. The green funnel points to the part of the fossil record that shows that flowers evolved in the Cretaceous period. The genetic analysis says flowers evolved in the Jurassic period. The timeline on the bottom shows butterflies supposedly evolved in the Triassic period. The text of the article throws some doubt on this timing.

> However, the timing of the origin of flower-visiting insects is debated. For example, for Lepidoptera (butterflies and moths), a Late Triassic radiation has been suggested on the basis of fossil evidence, but a recent study using transcriptomes covering nearly all Lepidoptera superfamilies dated the origin even further back, during the Carboniferous (~300 million years ago). Although butterfly diversification may be triggered more by host plant chemistry

[3] *ibid.*
[4] *ibid.*
[5] *ibid.*

than by floral diversity—which need not be correlated—given the importance of butterflies and moths for angiosperm reproduction, their diversification is important in understanding plant-pollinator interactions.[6]

What does this all mean?

Notwithstanding that the timing of the origin of angiosperms remains debated, if angiosperms arose before the Jurassic, this has profound implications for understanding how insect pollination evolved. There is little doubt that insect pollination accelerated the angiosperm radiation; however, which factor triggered what evolutionary event becomes more complex given the latest findings. It was long considered that wind pollination in early-diverging nonflowering seed plants (gymnosperms) was replaced by animal pollination in angiosperms, and that this switch to animal pollination led to angiosperm diversification, but this seems an oversimplification.[7]

In Other Words

What this means is that the fossil dates for the origin of flowers don't agree with the genetic (molecular, DNA) dates for the origin of flowers, and none of them correspond to the controversial dates for when pollinating insects evolved.

Of course, we do "doubt that insect pollination accelerated the angiosperm radiation."

Furthermore, the fairy tale about when and how flowers and insects evolved depends upon knowing the correct dates (and the assumption that flowers and insects evolved and were not independently created).

There isn't any evidence that non-flowering plants evolved into flowering plants. It is simply assumed that since flowering plants exist now, they must have come from somewhere. The least unlikely assumption is that they just happened to evolve from non-flowering plants at the same time as insects evolved to pollinate them.

The evolution of sexual reproduction from asexual reproduction is perhaps the biggest evolutionary mystery, which we have often addressed in our February (Valentine's Day) newsletters.

This might suggest to you that the theory of evolution is wrong because science is against evolution.

[6] *ibid.*
[7] *ibid.*

Evolution in the News

Why Try to Make Extinction Extinct?

If the theory of evolution is true, extinction is a good thing.

The theory of evolution depends upon random mutations filtered by natural selection. Natural selection depends upon survival of the fittest. Life becomes better (that is, more highly evolved) when the weaker species are replaced with stronger ones. Evolution depends upon the extinction of less fit species.

Therefore, if evolution is a good thing, we should be encouraging extinction rather than trying to prevent it. So why are scientists (all of whom must be evolutionists because all real scientists are evolutionists ☺) trying to prevent extinction?

Some scientists want to limit the number of species going extinct every year, world-wide, to 20 or less. This isn't the first time they have tried to limit extinction. They have tried before, and failed every time.

Next year, all eyes will be on Kunming, China, as talks resume on a new set of global goals to protect biodiversity. These are much needed, because most of the existing 20 targets, which were set in 2010 in Aichi, Japan, have failed to make an impact on the rate of biodiversity loss.

Last month, a team of researchers proposed creating one headline number, suggesting that countries should aim to keep extinctions to "well below" 20 known species every year worldwide. This would be the biodiversity equivalent of the 2 °C climate [change] target: a simple, measurable goal that can be understood by the public and politicians alike.

The proposal, by Mark Rounsevell at the Karlsruhe Institute of Technology in Germany and his colleagues, is intended to break nearly two decades of failure in global biodiversity policy and target setting — the 2010 Aichitargets replaced a previous unsuccessful target to slow the rate of biodiversity loss that countries set themselves in 2002. [8]

[8] Editorial, *Nature*, 30 June 2020, "Fewer than 20 extinctions a year: does the world need a single target for biodiversity?", https://www.nature.com/articles/d41586-020-01936-y

Science Hijacked by Politics

The "one headline number" is needed because it "can be understood by the public and politicians alike," who aren't as smart as the scientists who are trying to drive the political agenda of the left.

The comparison with a 2 °C climate change target was the first of seven references to climate change. Nowhere in the editorial is there any suggestion that climate change is related to extinction. The seven references are there just to make the political point that since some world-wide political power should control the climate, a similar world-wide group should control the rate of extinction, too.

> There are many questions for researchers working in biodiversity to explore. For example, how does a target of 20 extinctions per year — across all plants, animals and fungi — fit with IPBES's own assessment of biodiversity, which says that some one million species are at risk of extinction? Twenty extinctions per year — out of almost two million known species — is ten times higher than the background extinction rate of two per year that existed before humans made a notable contribution to extinctions. But it is considerably lower than today's estimates of species extinctions, which are in excess of 1,000 times the background rate.
>
> Other questions include how to choose which species to conserve, and who should make such choices. [9]

The editorial lists many questions, but not the most important ones. Who decided 20 extinctions a year is acceptable? Who put them in charge? How did they come up with the number 20? Who are they going to punish if more than 20 species go extinct? What is an appropriate punishment? These are political questions—not scientific ones.

Perhaps the most outrageous statement is "the background extinction rate of two per year that existed before humans made a notable contribution to extinctions." How was that measured? When did humans first make a notable contribution to extinctions? Was it when the first gatherer became a hunter?

The editorial ended with these words:

> But they will also know that, although the target to keep global temperatures to within 2 °C of pre-industrial levels was agreed by members of the UN climate convention, that number was subjected to a thorough process of research evaluation by a wide group of researchers in the IPCC [Intergovernmental Panel on Climate Change] before it was adopted.
>
> Any proposal to consider a single numerical target for biodiversity needs to be similarly assessed. IPBES [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services] — working with the UN biodiversity convention's own scientific advisers — should be called on to advise. For this to happen, a small group of governments need to make a formal request for scientific advice to the UN convention, and they should do so without delay. [10]

In last month's *Evolution in the News* column we told you "the word 'scientist' has become a politically correct synonym for 'lackey.'" Here is another example. United Nations bureaucrats are looking for "scientific advice" to justify their need for control.

Since extinction is the engine that drives the evolution of better and better lifeforms, who gives them the right to keep the world from becoming a better place? ☺

[9] *ibid.*

[10] *ibid.*

About Us

Catastrophic Failure

The extinction of my computer forced our operation to evolve.

The crash of my computer hard disk on June 29 complicated the publication of this month's newsletter. I had to buy a new computer. Although nearly all my data files were backed up, I lost all my programs. Microsoft Word for XP won't run on Windows 10. It has been tough learning a new operating system and new word processor.

More importantly, I can't get the Windows 10 email program to read my previously exported email address books. So, I have lost most of the addresses of readers who have asked for monthly email reminders that the newsletter is on-line. If you did not get an email on July 20 (or 21, depending upon your time zone) telling you the article titles in the July newsletter, that's why.

If you would like to get a monthly reminder, please send an email to Pogge@ScienceAgainstEvolution.info and ask to be placed on the mailing list.

by Lothar Janetzko

Discovery Institute

https://www.discovery.org

Public policy think-tank advancing a culture of purpose, creativity, and innovation.

While searching the web for articles and websites about creation and evolution, I recently "discovered" the website of the DISCOVERY INSTITUTE at discovery.org.

On the main page of the site you will find links to ABOUT, EVENTS, STORE, SUBSCRIBE, DONATE and SEARCH.

Selecting the link to ABOUT you can learn about what the Discovery Institute does and read the mission statement of the organization. Here you will also find a link to Navigator that will guide you to information about The Latest and Discovery Programs.

You will find some interesting observations in the mission statement of the Institute. "Mind, not matter, is the source and crown of creation, the wellspring of human achievement. Conceived by the ancient Hebrews, Greeks and Christians, and elaborated in the American Founding, Western culture has encouraged creativity, enabled discovery and upheld the uniqueness and dignity of human beings ... In contrast, the contemporary materialistic worldview denies the intrinsic dignity and freedom of human beings and enfeebles scientific creativity and technological innovation."

The way the Discovery Institute disseminates information is through "books, papers and reports, conferences, lectures and seminars, through regular radio and television appearances by scholars and fellows, and through sponsorship of national and international colloquia, seminars and conferences."

From the EVENTS link you can find information about upcoming events. On July 10, 2020, in Seattle, WA there will be a Seminar on Intelligent Design in the Natural Sciences and a CS Lewis Fellows Program on Science and Society. On July 23, 2020, in Seattle, WA there will be a Gilder Fellows Seminar [if permitted by Washington State Governor Jay Inslee]. You can also access Event Archives.

The STORE link will guide you to the Discovery Store where you can purchase books and films by Institute fellows and friends. The Institute publishes books exploring the intersection of science, education, technology, culture, and public policy using the Discovery Institute Press. The Discovery Store will allow you to select topics of interest from a vast array of subjects relating to creation and evolution. Most of the books published by the Discovery Institute Press can be purchased at Amazon.com.

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