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***Pollen Rocks Evolution***

by

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# POLLEN ROCKS EVOLUTION

“Before the mountains were brought forth, or ever thou hadst formed the earth and the world, even from everlasting to everlasting, thou *art* God.” Psalms 90:2

According to the modern evolutionary timeline, complex life did not appear until approximately two billion years after the formation of Planet Earth.<sup>1</sup> In 1963, a startling discovery was made that called this theory into question: pollen in a Precambrian rock formation.<sup>2</sup> This discovery has the potential to rock the foundations of the whole evolutionary system!

In this paper we will examine this discovery, and then look at the problem it presents for the evolutionary view and the evolutionary explanation (or lack thereof) for these fossils. We will then view the same evidence in a biblical light and finally conclude whether the evidence points to millions of years of random chance or that plants were created by God fully formed and reproducing on the third day, with this pollen being deposited in these rocks during the Flood.

## A Surprising Find

In 1963, botanist U. C. K. Dunsterville was searching the hills and valleys of the Cerro Venamo area on the border of Venezuela and British Guiana for some rare orchids.<sup>3</sup> While there, he noticed a shale-like cliff, located in the Roraima Formation mountain range, where he picked up some geological specimens, thinking they might contain something of “paleontological interest.” Dunsterville then sent them to G. Fournier, a

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<sup>1</sup> Adam Dimech, “Evolution Timeline,” [www.adonline.id.au/plantevol/evolution-timeline/](http://www.adonline.id.au/plantevol/evolution-timeline/) (Accessed April 16, 2018).

<sup>2</sup> “Roraima pollen paradox,” [https://rationalwiki.org/wiki/Roraima\\_pollen\\_paradox](https://rationalwiki.org/wiki/Roraima_pollen_paradox) (Accessed February 25, 2018).

<sup>3</sup> R.M. Stainforth, “Occurrence of Pollen and Spores in the Roraima Formation of Venezuela and British Guiana,” *Nature* 210 (April 16, 1966):doi:10.1038/210292a0.

palynologist (pollen specialist) who carefully studied the rocks for anything of paleontological importance. What he found was startling: “pollen and spores.” Two other palynologists, after hearing about Dunsterville’s find, went and collected their own specimens, studied them independently, and found more “pollen and spores”.<sup>4</sup>

The scientists were stunned. The rock formation these specimens had come from was classed as Precambrian, a period said to be millions of years before any complex life had supposedly evolved.<sup>5</sup> This new finding had to be officially confirmed before word got out. Immediately, an official group of palynologists agreed to collect fresh samples and do another study.<sup>6</sup>

In April 1964, a group of seven palynologists went to the same site the others had gotten their rocks from and collected new samples. However, unlike Dunsterville, whose samples had been loose pieces of rock collected from the bottom of the cliff, this group, wanting to avoid any possible chance of contamination, carefully collected their samples from an unweathered section of the cliff. While collecting them, they were also careful to avoid any place in the rocks where there were cracks or other deformities. After collecting their samples, they all independently studied them, again being very careful to avoid any contamination from outside pollen. A few of the researchers even went so far as to chip off all the outside of their samples, leaving only the core, so as to be absolutely certain they would not be contaminated with any modern pollen, or anything else. However, the results of their study again showed “pollen and spores.”<sup>7</sup>

Clearly, there had to be a rational reason why there was pollen in these ancient rocks, formed approximately 480 million years before flowering plants had supposedly evolved. The pollen was carefully studied and then classified as pollen from angiosperms (flowering plants).<sup>8</sup>

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<sup>4</sup> *Ibid.*

<sup>5</sup> Carl Wieland, “Fossil pollen in Grand Canyon overturns plant evolution,” <https://creation.com/fossil-pollen-in-grand-canyon-overturns-plant-evolution> (Accessed February 25, 2018).

<sup>6</sup> R.M. Stainforth, “Occurrence of Pollen and Spores in the Roraima Formation of Venezuela and British Guiana,” *Nature* 210 (April 16, 1966):doi:10.1038/210292a0.

<sup>7</sup> *Ibid.*

<sup>8</sup> Adam Dimech, “Evolution Timeline,” [www.adonline.id.au/plantevol/evolution-timeline/](http://www.adonline.id.au/plantevol/evolution-timeline/) (Accessed April 16, 2018).

# The Problem for Evolution

So why does this intriguing find create such a big problem for evolutionists? According to the evolutionary timeline, the Earth was formed 4.6 billion years ago (bya). In the late Precambrian/early Cambrian period, approximately 550 million years ago (mya), the first one-celled organisms evolved. In the late Cambrian, approximately 500 mya, the first primitive algae developed. Around 400 mya, in the Devonian period, the first vascular land plants evolved; and 290 mya, the first ferns and gymnosperms (wind pollinated plants) began to appear. In the early Palaeogene, around 65 mya, period the first angiosperms (flowering plants) appeared.<sup>9</sup> The Roraima formation is dated to 1.5 to 1.8 bya.<sup>10</sup> Even if the younger age for the Roraima formation (1.5 billion years old) is used, there is still a huge time gap between when the formation was laid down and when the first flowering plants supposedly evolved – a 1.4 billion year gap! Clearly this presents a huge problem for evolutionists. How do they explain it? As the evolutionists studied these fossils, they formed two distinct opinions as to how the pollen came to be in the rocks: 1) The pollen was some kind of ancient contamination, or 2) the rocks were incorrectly dated.

## The Evolutionary Explanation

### Contamination

Four of the same scientists who formed the original group of palynologists to study the rocks, agreed to try to date the fossil pollen. All four came up with wildly differing dates, ranging anywhere from 250 to 25 mya. However, they all firmly agreed it was not modern pollen. One palynologist, T. Van der Hammen, suggested that some of the pollen might be contamination because when he ultrasonically cleaned a few rock fragments, most

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<sup>9</sup> *Ibid.*

<sup>10</sup> “Roraima pollen paradox,” [https://rationalwiki.org/wiki/Roraima\\_pollen\\_paradox](https://rationalwiki.org/wiki/Roraima_pollen_paradox) (Accessed February 25, 2018).

of the pollen disappeared. However there was still some pollen left in the rocks even after his ultrasonic cleaning that needed to be explained.<sup>11</sup>

One of the palynologists, G. Fournier, compared the fossil pollen to samples of pollen from J. Steyermark's herbarium, a collection consisting of native plants from the area where the fossils were collected. The fossil pollen was not even close to the modern pollen.<sup>12</sup> Clearly, the contamination (if that is what it was) was not recent. The evolutionary scientists argued that somehow, millions of years ago, in the Precambrian period, after the basement rocks had formed and while the upper layers were still forming, some kind of meteoritic waters must have percolated down through tiny cracks laced through the rock and carried pollen with it down through the rocks and contaminated them.<sup>13</sup>

This, however, is highly improbable for a number of reasons.

- 1) The formation the fossils were found in (the Roraima Formation) is an incredibly thick formation, in some places 1300 feet thick.<sup>14</sup> The samples were taken from a cliff that had been eroding for some time.<sup>15</sup> This means that the fossils would have originally been deep inside a massive rock formation that was very thick and wide, and therefore it would be very hard for water to carry pollen, or anything else, so deep into the rocks.
- 2) The place where the palynologists collected the specimens was near the bottom of the formation, just above the basement rocks, and above it had tons and tons of rock laid over it.<sup>16</sup> It would be incredibly difficult to carry grains of anything down through hundreds of feet of rock.
- 3) The rock in which the samples of pollen were found is a very thick and non-porous type of rock. It is also very dense, hard enough to produce an audible sound when struck with a hammer.<sup>17</sup> These rocks are

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<sup>11</sup> R.M. Stainforth, "Occurrence of Pollen and Spores in the Roraima Formation of Venezuela and British Guiana," *Nature* 210 (April 16, 1966):doi:10.1038/210292a0.

<sup>12</sup> *Ibid.*

<sup>13</sup> "Roraima pollen paradox," [https://rationalwiki.org/wiki/Roraima\\_pollen\\_paradox](https://rationalwiki.org/wiki/Roraima_pollen_paradox) (Accessed February 25, 2018).

<sup>14</sup> *Ibid.*

<sup>15</sup> R.M. Stainforth, "Occurrence of Pollen and Spores in the Roraima Formation of Venezuela and British Guiana," *Nature* 210 (April 16, 1966):doi:10.1038/210292a0.

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ibid.*

made up of primarily muscovite (a very hard type of rock) with some quartz and other minerals, creating a very hard and impermeable material, which would be nearly impossible for anything, even water, to get through.<sup>18</sup>

- 4) Even if, somehow, the pollen could make its way down through the tons of rock, it would seem that there would be a very widespread array of pollen, dating from ancient times to the present. However, there is only a small amount of pollen which all of the scientists agreed was very old.<sup>19</sup>

With these four reasons, it seems fair to conclude that any contamination is highly improbable, if not totally impossible.

## Age of the Formation

We will now examine the second, less popular view, that the Roraima Formation could possibly be incorrectly dated. Here we will quote R.M. Stainforth, one of the original palynologists, with a summary of the second view. “The second group holds that by no conceivable physical means could the pollen (and spores) have entered the metamorphosed sediments from the outside...As regards the radiometric dating, there is a disquieting overlap between stated ages of the Roraima Formation and the underlying basement rocks. The latter suffered complex deformation and volcanism and were then deeply peneplaned before being covered by thousands of feet of Roraima Sandstones and only after these prolonged events were the dolerites intruded on which age determination of the Roraima has been based. If the radiometric technique is valid, there should be a long and clear-cut time gap between ages assigned to the basement rocks and to the Roraima beds. Such a gap does not exist in the experimental results published, but this discrepancy is glossed over...We offer no solution to the paradox. It is clear, however, that botanist Dunsterville, in his hunt for rare orchids, stumbled on a highly intriguing geological problem.”<sup>20</sup>

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<sup>18</sup> *Ibid.*

<sup>19</sup> “Roraima pollen paradox,” [https://rationalwiki.org/wiki/Roraima\\_pollen\\_paradox](https://rationalwiki.org/wiki/Roraima_pollen_paradox) (Accessed February 25, 2018).

<sup>20</sup> R.M. Stainforth, “Occurrence of Pollen and Spores in the Roraima Formation of Venezuela and British Guiana,” *Nature* 210 (April 16, 1966):doi:10.1038/210292a0.

In other words, if the evolutionists that believe the Roraima Formation is incorrectly dated are correct, then when they re-evaluated the formation using radiometric dating, the results should show a clear time gap between the basement rocks and the overlying Roraima Sandstone. However, their experiment showed radiometric dates of approximately the same age for both the basement rocks and the sandstone above: Precambrian. The only option left for these evolutionists would be to say that the radiometric dates for these rocks is wrong. However, if they say that this radiometric tested date is wrong, and cannot be trusted, what of the other radiometric dates that the entire evolutionary timeline is based upon? Further and more recent studies have confirmed a Precambrian age for this formation.<sup>21, 22</sup>

The evolutionists have not been able to come to a conclusion or give a satisfying answer to this question, other than these two weak arguments. Instead, they attempt to explain it away or remain distressingly silent. As one scientist, Emil Silvestru, puts it, “Examples that could not be explained were simply ignored, never being mentioned again.”<sup>23</sup> The same scientist, commenting on a different “pollen in Precambrian rocks” find, says, “After many unsuccessful and well-documented efforts to explain the discoveries away, a veil of silence covered them.”<sup>24</sup>

## In Light of the Bible

So how is the pollen in these rocks explained? How could the pollen have gotten into rocks buried by 1300 ft. of sandstone?

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<sup>21</sup> H.N.A. Priem, N.A.I.M. Boelrijk, E.H. Hebeda, E.A.Th. Verdurmen, & R.H. Verschure, “Age of the Precambrian Roraima Formation in Northeastern South America: Evidence from Isotopic Dating of Roraima Pyroclastic Volcanic Rocks in Suriname,” *GSA Bulletin* 84(5) (May 1973):1677-1684.

<sup>22</sup> Nelson Joaquim Reis, Serge Nadeau, Leda Maria Fraga, Leandro Menezes Betiollo, Maria Telma Lins Faraco, Jimmy Reece, Deokumar Lachhman, & Randy Ault, “Stratigraphy of the Roraima Supergroup along the Brazil-Guyana border in the Guiana shield, Northern Amazonian Craton – results of the Brazil-Guyana Geology and Geodiversity Mapping Project,” *Brazilian Journal of Geology* 47(1) (Jan/Mar 2017):<http://dx.doi.org/10.1590/2317-4889201720160139>.

<sup>23</sup> “Roraima pollen paradox,” [https://rationalwiki.org/wiki/Roraima\\_pollen\\_paradox](https://rationalwiki.org/wiki/Roraima_pollen_paradox) (Accessed February 25, 2018).<sup>24</sup>  
*Ibid.*

There seems to be only one plausible answer: a catastrophic event that would have encased the pollen in mud, then covered that by tons of sediments which hardened and turned the whole formation into the rocky mountain range we see today.

These pollen fossils point to a global flood. The only explanation that fits these fossils is that God made plants fully mature and able to reproduce on the third day of the creation week. Their pollen was then encased in lava flows during the catastrophic beginning of the Flood, which was then covered by other sediments as the waters decreased. Looking at these fossils, we can see clear evidence for a global flood and a Creator God.

The Roraima Formation pollen fossils are not a rare and isolated occurrence; there have been many other similar finds of pollen in Precambrian/Cambrian rocks. For example, pollen and insects were found in a Precambrian formation in Pakistan.<sup>25</sup> Pollen has also been found in the Grand Canyon,<sup>26</sup> Kashmir, Guyana, and several other places as well.<sup>27</sup>

## Conclusion

According to the evolutionary timeline, complex life did not appear until approximately two billion years after the Earth was formed.

This paper presents a fossil discovery that has called this theory into question. We have examined the Roraima pollen fossils and have explained why this presents a problem for evolutionists. We have also examined the evolutionists' attempt to explain these "out of place fossils" by contamination or incorrectly dated rocks, and have shown how these arguments are unsupportable. We have then looked at these fossils in the light of creation and the Biblical flood. It is clear that God created all plants fully formed and reproducing on the third

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<sup>25</sup> Michael A. Cremo, "Paleobotanical Anomalies Bearing on the Age of the Salt Range Formation of Pakistan: A Historical Survey of an Unresolved Scientific Controversy," XXI International Congress of History of Science, [www.mcremo.com/saltrange.html](http://www.mcremo.com/saltrange.html) (Accessed April 20, 2018).

<sup>26</sup> Emmett L. Williams, "Precambrian Pollen: A Response to Questions about Creationist Research," <https://www.rae.org/essay-links/pollen/> (Accessed April 30, 2018).

<sup>27</sup> Walt Brown, "Out-of-Sequence Fossils," <http://creationscience.com/onlinebook/LifeSciences29.html> (Accessed April 16, 2018).

day of the creation week and that these fossils are clear evidence for a global flood such as the Bible describes (Genesis 6).

“Bless the LORD, O my soul. O LORD my God, thou art very great; thou art clothed with honour and majesty... *Who* laid the foundations of the earth, *that* it should not be removed for ever” (Psalm 104:1, 5).

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