

miniature Peggy Grant. Another grew about 10 inches with double flowers resembling Pink Joy (a seedling of Oakington Ruby) in both color and form. Yet another produced 1¼ inch semi-double lavender blue (magenta) flowers on a 12 inch plant.

Several set seed hips but seeds often contain no embryo. Germination has been very poor from any of these seedlings. However, some seedlings of the, lavender blue (Mr. Bluebird) variety have been grown. All are miniature—usually with very narrow lance shaped petals and so far all have been female sterile but some pollen is produced.

The other lots grown from Old Blush, although in smaller lots, gave similar results.

Miniature Roses Not Magic

Now, in view of the above and many other observations, I believe that *Rosa rouletti* may not be as old as supposed. It may even be a fairly recent seedling from one of the old China varieties such as Old Blush. The miniature factor (or more likely an inhibition linking both size and sterility) can and has arisen in various times and places. Since this phenomenon is apparently caused by an inhibition, or blocking of the "normal" (complete message) factors for rose size, fertility (and other associated phenomena), it may not only appear when "blocking" occurs, but may be reversible and may disappear with removal of blocking and return to normal.

Blue and lavender miniature roses can be produced as they are with hybrid tea and floribunda roses, insofar as these colors are possible. There is apparently no possible source of true blue in roses. (There are those who believe that at some magic moment a chance mutation will bring this about.)

So called "blue roses" are merely those in which the magenta has the ascendancy. Lavender color apparently is produced by the combina-

tion of magenta and yellow. Some will doubt this, but about 15 years ago in a conversation, I told Dr. Fred Nisbet, then Executive Secretary of the American Rose Society, that I believed such to be the case. A check of the pedigree of so called lavender roses will show that this is true.

I have made crosses a number of times using the old multiflora rambler, *Violette*; i.e. *Violette* x *Zee* (pollen from most other miniatures has failed). From such crosses have been selected several miniatures, both bush and climber, showing pinkish-lavender to magenta colors. The "bluest" of these is *Purple Elf* which at times is petunia purple. All these are very difficult to propagate.

More recently I have produced a really lavender miniature rose from a cross of *Ellen Poulsen* x (*Little Darling* x *Zee*). The male parent (*Little Darling* x *Zee*) is yellow aging to pink and light red similar to *Baby Masquerade*. Thus our lavender miniature was produced exactly as set forth above: magenta in combination with yellow.

There is no trick; there is no magic involved in producing any new rose, miniature or otherwise. All that we call new is but the old in a different combination. These principles and the materials are basically the same—today, or in that yesterday we call Creation. God is the same yesterday, today and forever. All we do is think God's thoughts after Him.

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REINTERPRETATION OF FACTS BEHIND THE THEORY OF EVOLUTION

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Variations among organisms within a particular kind do not lead to the formation of new kinds or alter God's design that organisms reproduce "after their kind." So-called evidence for the theory of evolution is merely persuasive or circumstantial, and can be used to support the Genesis account as well as the theory of evolution. All that is really known is that organisms vary markedly due to changes in genetic make-up and due to interactions with the environment. God has designed the living world of different types of organisms to survive by adapting to changes in conditions.

First of all there is such a thing as genetic variation which produces a marked degree of variation in living organisms of any particular type:

1. There are systematic variations in offspring due to recombination of genes, expressed as

dominant and recessive characteristics.¹

2. There are less systematic variations due to gene and chromosome mutations. Mutations may be small or great, and they usually affect the viability and the fertility of the organism and its offspring.

Organisms as individuals and as groups do adapt themselves to their environment and to changes in environment:

1. It is logical that those organisms which are better fitted genetically will live longer, reproduce in larger numbers, and become more deeply entrenched.

2. Those with a less favorable genetic make-up may not live as long in competition with others and with the environment, will probably decrease in number, and may migrate to another environment where there is less competition and where their particular genetic makeup is used to advantage.

3. These causes of variation and divergence among offspring have the effect of producing **variations among organisms within a particular kind and often work toward the survival of the best of the organisms within a particular kind.** But these do not lead to the formation of new kinds nor alter God's design that organisms reproduce after their kind.

None of the above points prove evolution to be true or the Bible to be false; neither do they require a mythical interpretation of the Bible.

It is only reasonable to believe the following:

1. The original creation included each basic kind of organism endowed by God with the genetic makeup and potential making it possible for a maximum of versatility and genetic adaptability to future changes in the environment. This would guarantee survival of the various types of organisms in a variety of environments, and also guarantee their ability to reproduce themselves in a manner capable of keeping the earth populated until the end of time.

2. Divergence into a large number of varieties (and what some taxonomists now call species) could occur without violating the concept of God creating all of the basic types of organisms; such as,

(a) specific but normal traits could become evident in subsequent generations as a result of interactions with the various types of environments encountered,

(b) some more pronounced variations might come from mutations, but these would almost always be eliminated by natural selection, and

(c) in addition to variations in environmental conditions from one location to another, it is possible that world wide changes and environmental conditions from one time to another would require adjustment by living things. This is where natural selection could play a part, but the importance of changes in environment should not be underestimated. An illustration of this might be the fact that in Adam's day men lived to be approximately 900 years old, but sometimes

after the Flood, life expectancy decreased to approximately 70 years.

The Second Law of Thermodynamics indicates that, from a general point of view, all forms of energy in the universe (or in any closed system) are being transformed into heat energy. The end point of this trend is generally referred to as heat-death, and refers to a time when supposedly all matter in the universe will be randomized and at a uniformly low temperature. This gradual increase in the percentage of disordered energy is referred to as an increase in entropy. It should be pointed out that this principle cannot be ultimate in nature, or it would have been impossible for the organized universe and for living things (and thinking individuals) to originally come into existence; thus, we should consider the following:

1. The non-living universe appears to be running down like a watch that was originally wound up and allowed to run down. Another common illustration is that the universe is like a great furnace that was originally lighted and stoked, and is now in the process of burning out.

2. However, there is no evidence that living things are actually following the Second Law of Thermodynamics as long as the world will remain well suited for organic life and a wide diversity of living forms will populate its surface. Living things as we know them in nature, certainly did not create, wind up, or stoke the universe in the beginning.² But the existence of an organized universe and growing, reproducing, diversified life certainly could be explained as the handiwork of a powerful, intelligent Creator.

3. Also there is really no coercive evidence that there is a "creative trend" in genetic factors of any given type of organism. So called evidence for the theory of evolution is merely persuasive or circumstantial (such as fossils and anatomical differences) and can be used to support the Genesis account as well as the theory of evolution.³

Total evolution, or the concept that living and extinct organisms have come from a common ancestor (solely through the action of natural laws), seems extremely unlikely regardless of the time allowed. By this we mean human beings descending from ape-like, shrew-like, dinosaur-like, fish-like, and amoeba-like organisms.

Charles Darwin and modern Evolutionists rely on variations and the laws of variation to produce the gradual changes by which natural selection supposedly results in total evolution. Darwin relied upon fortuitous variations, and evolutionists today rely upon better known genetic mechanisms, but the Christian considers these marvelous phenomena to be evidence of God's power,

design capability and purpose (see Romans 1:19, 20).

4. Rather than total evolution being proved, all that is really known is that organisms vary markedly due to changes in genetic makeup and due to interactions with the environment (and changes in environment due to migration, isolation, catastrophic change). Much of this evidence of variation is circumstantial, but some of it is valid and coercive, such as that which comes from breeding experiments.

5. God has designed the living world of different types of organisms to survive by adapting to changes in conditions. He has given each kind a distinctive genetic makeup capable of variations so that each kind can adapt to change. Individuals cannot survive; particular variations within a kind do not all survive (extinction); and even some kinds may not survive catastrophic changes in environment (for example, dinosaurs became extinct either before the Genesis Flood, or in the climate and environment following it).

Conclusion

It is certainly true that Christians derive their faith in God from the Bible. It is also true that Creationists, Theistic Evolutionists, and some Naturalistic Evolutionists believe in an ultimate organizing power and process, based on observations of the universe and nature. The difference is that Agnostic Evolutionists believe that this ultimate principle is non-personal, non-intelligent, and is a fortuitous set of eternal laws of

nature and that intelligent beings are the product of these laws and forces.

Creationists and Theistic Evolutionists, on the other hand, believe that a living, intelligent, powerful Being is the ultimate source of the universe, the non-living world, living things, and human society. Considering the ambiguous faith required by those who believe in both evolution and the Bible, we find it hard to justify the position of the Theistic Evolutionist. God thwarts the wise and reveals himself to "babes" (Matt. 11:25-27), and to the mature (2 Cor. 2:15).⁴

Notes and References

¹Not a random recombination since in normal meiosis specific genes are linked with specific chromosomes. See Simpson, Pittendrigh, Tiffany, *Life: An Introduction to Biology*. New York: Harcourt, Brace and World, 1957.

²Clark, R. E. D., *The Universe: Plan or Accident*, Philadelphia, Muhlenburg Press, 1961, pp. 15-25. Morris, Henry, *The Twilight of Evolution*, Grand Rapids, Baker, 1964, pp. 33-37.

³"Evidence is coercive [when] it admits of only one interpretation." Evidence is pervasive when it is subjective and capable of explanation from more than one point of view." Marsh, F. L., *Evolution or Special Creation?* Washington, Review and Herald Publ., 1963, pp. 4, 6.

⁴"It is not . . . a question of whether God has deceived scientists concerning the matter of origins if Genesis should turn out to be true. The real question is whether God has deceived those who have taken the Book of Genesis seriously if the modern uniformitarian and evolutionary view of origins should turn out to be true." Whitcomb, John, Jr., *The Origin of the Solar System*. Philadelphia, Presbyterian and Reformed Publ., 1964, pp. 28, 29.

A COSMOLOGICAL DEVELOPMENT

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A major developer of the steady-state theory, Prof. Fred Hoyle, has reversed his position. He has announced that he has discarded this widely known cosmological formulation. Such a change in the thinking of a leading astronomer is relatively unimportant to the fundamental Christian. Yet, it is another evidence that modern science is imperfect and limited severely in the area of cosmology. Cosmological speculations, as such, are not anti-Christian; however, cosmology must contain a truly Biblical cosmogony to be acceptable to the Christian.

In recent months, modern astronomers have witnessed one of the most important theoretical developments of this decade. Prof. Fred Hoyle, of the University of Cambridge and one of the leading theoreticians in astronomy today, has repudiated the controversial steady-state theory.¹

Hoyle, together with Hermann Bondi and Thomas Gold, was one of the developers of the steady-state theory in 1948. Since that time he has been one of its chief proponents and has succeeded, through his popular writings, in making the theory widely known.

The steady-state theory, in common with other cosmological theories, has as its goal the under-

standing of the universe, including the question of its origin. According to this theory, the universe is in a continual state of expansion.

To account for the expected decrease in the average density of galaxies in the universe, it is assumed that new matter is created **out of nothing** in empty space. This matter condenses into new galaxies. The rate of creation of matter just balances the expansion of the galaxies so that a galactic observer would see essentially the same picture of the universe at any time, no matter where his location in the universe.

Necessarily, if this theory be true, the average density of galaxies in the universe has remained