

## Fundamentals of Genetic Science in the Holy Quran

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### ABSTRACT

*The Holy Qur'an does not only disagree with the sciences of the day, but also agrees with them, but this does not mean that the Qur'an is a pure science book. Rather, the Quran confirms science, and science is only a part of the knowledge of the Qur'an's scripture for human understanding and guidance. Humans spent many years learning about the secret between production and reproduction among plants, while this mystery has no place in the earlier scriptures such as the Torah and the Bible. I do not know why God made the Holy Quran an exception in this regard, but whatever it is, it is nothing but a divine miracle that every day a new reality is discovered through sophisticated experiments, and then Muslims find out why God in the Quranic verses said: "plants marry with each other."*

*Perhaps the Muslims themselves once did not have the right answers to these questions, and we know that the history of genetic science is not more than two hundred years old. Genetic science today has become a two-fold human and plant classes that in both cases God has spoken in the Qur'an for many years, so with the advancement of science and technology and the pioneering technologies in the field of nanotechnology, our awareness of the holy Quran and its miraculous verses becomes more and deeper. In this study we try to reveal some fundamentals of genetic science in the holy Quran.*

**Keywords:** Genetics, Human, Holy Quran, Marriage, Divine Miracle

### INTRODUCTION

Undoubtedly, the Holy Quran is the oldest scientific written document in human embryology and genetics. The Qur'an says: Children are the heirs of their parents' attributes. And the Quran tells how it fertilizes sperm and ovule in the womb, is full of jelly and meat for several weeks and for how long it has vital organs. Also about the marriage of plants and insects such as bees that transmit nectar to flowers and cause other plants to bear fruit.

Genetics, of course, is not easily defined by the vast range of studies it has found today, but as its name implies, in a general sense, genetics can be the science of studying the human and vegetable genomes, and the inheritance of traits in humans, animals, and plants. In the history of Islam, there is a day when a man came to Imam Ali (P.B.U.H) and said: I want to divorce my wife, because she is undoubtedly treacherous and has born a black baby. While our family is not black! Imam Ali (P.B.U.H) said: Go and bring your wife and child.

That man did so, and then Imam Ali (P.B.U.H) asked the father and mother of the man's wife

and asked the same questions to the man! Also Imam asked some questions about her grandparents, then Imam Ali (P.B.U.H) said: As your wife said: His grandfather was black and this baby looks like him! So your wife is not a betrayer!

That day Imam Ali (P.B.U.H) solved this problem and rewrote it for a thousand and three hundred years by Islamic scholars, but no one asked himself whether the inheritance of women is also important in determining the characteristics of a child. No one asked himself whether the man, according to the false beliefs of ancient Arabs and Greeks, does not do the process of fertilization, but just his sperm is only half of the cell. The other half is the female ovule, which fertilizes and produces the whole cell, and no one has asked himself why the inheritance of the female great ancestor came to the male child! So we didn't do anything until "Gregory Mendel" in the next thousand and a hundred years expressed hereditary traits.

### THE HOLY QURAN AND MOLECULAR BIOLOGY

The Holy Qur'an recognizes the origin of animals as male and female germs and mentions

them in the verses of the chapter of Star, but the evolution of genetic science in a brief and concise statement is as follows: The first man who was able to transpose inheritance traits was an Austrian priest named Gregory Mendel who introduced these rules in his experiments on the pea plant in 1865. However, the scientific community of that time did not pay much attention to his views and discoveries, and the results of Mendel's work were forgotten, and the case for this knowledge seemed to be closing.

In 1900 the rediscovery of the laws proposed by Mendel, Dewey, Shermac, and Cornens made his theories considered and accepted as Mendel's father of genetic science. In the year 1953, with the discovery of the DNA locus by James Watson and Francis Crick, a new field of biology was created called molecular biology.

After passing one century from Mendel's discovery, there was a combination between the field of molecular and genetic biology, the first deals with the structure and mechanism of action of genes and the second with genetic diseases and therapeutic approaches, so a new field called genetic engineering. They were able to overwhelm various fields of medicine, industry and agriculture in a short period of time and to adopt different views of the present day.

The basis of genetic engineering and biotechnology is the transfer of one or more genes of one organism into the genetic pool of another organism. Thus, the new organism will have genes that it did not have in the past, and will now be forced to express the gene under appropriate environmental conditions, the product of which may lead to a particular trait or product.

In recent years, genetic engineering and biotechnology have been the source of valuable services for humankind. The most important achievements of this knowledge can be its impact on various domains such as breeding of animals and plants with the aim of producing more products, supplying drugs and hormones of high purity and low cost, treating genetic diseases by altering the egg cell, and many more. Prenatal diagnosis of genetic diseases, accurate diagnosis of the child's relationship with parents and also the technique of identifying offenders from remnants of their body, hair or blood are other molecular genetics abilities.

Genetic science is therefore a fledgling science that is not long in history, and this brief history

shows just how much scientists have worked to prove it to the man during the two past centuries, but can we admit that these findings are new for us? Yes, all these things are based on DNA recognition and the structure of the human and vegetable genome of scientists' research findings, but the genetic foundations were fully expressed in the Holy Qur'an and today it is regrettable to study genetics because the discoverers were not one of us. ? And there is also the excitement and amazing for human being to know that:

1. How wise and holy is Allah, in his miracle, he cites material that was discovered thousands of years later and is a reminder to people as pure, clean water.

2. It is easier to understand the meanings of the Quranic verses that have been scientifically discovered.

3. Man believes in the greatness of Allah and His Book.

4. It shows that the holy Qur'an not only in one thousand and four hundred years ago, but now also has no competitor and always sees the battlefield empty. All those who wrote the book against the Qur'an throughout history were never able to counter the Quranic text, but only insulted and slandered themselves, who later confessed their own ineptitude.

5. This verse is truly believed to be "This Book is a Guide to the Righteous" (Cow / 1)

6. The holy Qur'an does not disagree with the science of the day, and this does not mean that the Qur'an is a pure science book, but the holy Qur'an confirms science and that science is only as a part of the knowledge of the Quranic scripture for human understanding and guidance. "Everything has come in this holy book for the guidance of mankind", so it is not more than two centuries passing the story of genetic scientists, and in fact, more than a century of full scientific and DNA of human and animal genes and plants and genomic studies. And also the complete map of the human, plant and animal genome goes back less than thirty years.

Muslim scholars, with their daily studies and more recent discoveries, are discovering the divine greatness and power of Allah and how to awaken the ignorant man after a thousand and a hundred years' sleep and place him only at the beginning of the path of knowledge. Indeed, what was discovered from genetic science and

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what is still being discovered are only small steps that guide man into the unknowns of nature.

### WHAT DOES THE HOLY QURAN SAY ABOUT DNA?

Most of all, with the advent of science, genetic science encompasses various branches and specialties, which are essentially divided into two general categories of animal and vegetable. Genetics and the use of genetics in medical science has been done by working on animals and still testing the animals first and then testing them on the target (patient), if they come up as a strategy or drug, It is introduced to the world, so



The structure of DNA was discovered by Francis Crick and James Watson in year 1953, and both received a Nobel Prize in year 1962 for this discovery. A cell without DNA has no function and is virtually dead.

The holy Quran mentioned that: "Man is created out of "عجل", we will show our verses "in the future". So don't haste at all. " (Prophets,37)

Interesting point that we will show you in the future is that we will show you our signs and that is to say it will soon be discovered and this part increases the probability that this verse applies to DNA.

In humans, all the cells necessary for the creation of a new human are produced by cell division and the function of genes and instructions that make DNA and RNA. Finally, thanks to God and these living and intelligent microscopic particles, an adult human being becomes like a parent. The slightest change in one of the genes during and after cell division gives birth to a defective child that can be a variety of syndromes, all of which are impossible without a large, orderly creator.

The fundamentals of genetic science about animals and humans are mentioned in the Holy Quran. The best example of animals is the story

an important part of these studies is medical genetics, whose foundations include the placenta of animals and humans and the role of inheritance in placentas.

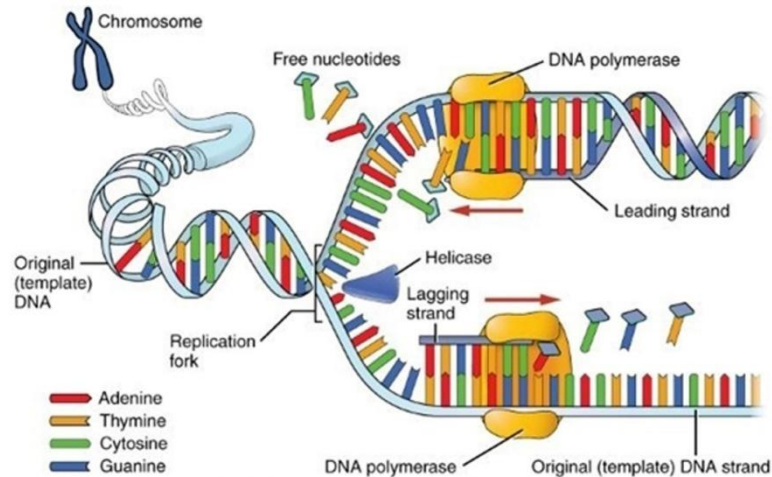
DNA or deoxyribonucleic acid: The units at the center of each cell that contain the genetic information of the cells those are at the center of the cells. The cell continues to operate using DNA information. DNA has a protein structure and contains genes; chemically it is a long polymeric DNA with nucleotide units and is composed of phosphate-bonded columns. A DNA molecule may be made up of millions of nucleotides and is like a twisted ladder connected by bases.

of Noah's Ark; Where God orders the animals to be kept in pairs. If for a God who could create all from nothing and create Adam and Eve out of the soil and create a child in the name of Jesus (P.B.U.H) without father, the creation of those animals just needed a word from God. Just Allah should say "be" new creation will occur, but by pairing God wanted to teach people that reproduction is only in pairs.

In the holy Quran, in the chapter of Splitting, the verses of 6 to 9 Allah says:

O, man! What has beguiled you from your Lord, the Gracious One. (6) Who created you, then made you complete, then made you symmetrical? (7) Into whatever from He pleased He constituted you. (8) Nay! But you give the lie to the judgment day. (9)

In the seventh verse, scientifically ordering refers to the action of polymerase and primer DNA enzymes that perform replication and place C against G and A against T and perform the correcting and sorting operation. The eighth verse refers to the continuation of the replication process by the enzyme Ligase, which binds two strands together and creates one another. The process of creation in the verse 7 indicates to the beginning of simulation and cell division.



***Holy Quran mentioned:” Who created you, then made you complete, then made you symmetrical?”***

We know that even a single spermatozoid is enough for the egg, so the Quran comes out first and separates the sexes, namely the pair of men (the male) with fluid in the uterus (safe place). (By colliding with the egg and the egg cell) The cells slowly differentiate and become specialized and produce tissues. The Holy Qur'an says: See, man, what did we make of him? From a elastic water that carries half of a man's inheritance, and this water is of no value, and of no earthly nature at all, but of the transcendent dimension of man and spirit, of supreme value and excellence, because man is in fact nothing except his soul that is base and unique.

Molavi says, “O man, your soul and thought are worth, otherwise your body is not worth “. Then the race of mankind was rendered immense by the water”. In Arabic "سلاله" means anything is said to be slowly separated and ejected, so a living thing in the semen of a man and a woman, which is the sperm and the egg, can be termed as the hundreds of millions of sperm. Typically in the male semen, only one sperm is separated and fertilizes the egg, as the egg separates from the ovary and crosses with the sperm in the uterus.

On the other hand, this gene can be called living genes and DNA that are on sperm and ovule, which cause cell division and differentiation of cells, because the chromosomes that exist between the genes on the sperm and the egg are almost different. The two kill each other and so-called separate from their original state, so the differentiated cell is no longer part of the female body, but the living entity with the mother. On

the other hand, this water is a jerk. The mechanism of the mutation causes the sperm to reach the egg with the help of antennae. "Man was created out of elastic water."

The medical and medical cases of embryology that underlie the foundations of human genetic science are abundantly found in the Qur'an, and as the centuries have passed and the advancement of science, their concepts are now more tangible. God does not consider man-made embryo to be that of a male, but blends it with the combination of the two male and female secretions that underlie all genetic findings and how much human effort has been made to prove this fact. Here is what the Holy Quran says: Verily we have created man from a mixed seed (male and female; male gamete; female gamete; sperm and egg) and again, God states in the Qur'an: "Verily we created you from man and woman".

This means that man and woman were created from the soil once, and then their genital relationship was only by way of a reproductive and marital mechanism, the offspring combining two precious waters that, thanks to God, represent him, because he is capable of copper. Human beings make gold, so it is after this stage of egg cells that the Qur'an does not go into details about what hormones are secreted, what a complex process it is, but it touches on things that bypass all human knowledge. We know that the egg cell is actually the first stage of human creation and the beginning of the pre-embryonic stage (the pre-embryonic stage which tells from zero hours to the end of the second week, the embryonic stage that tells from the beginning of

the third week to the end of the eighth week, the embryonic stage From the beginning of the ninth week until the time of birth)

According to the above, the first stage of the Holy Qur'an is the stage of germination. These steps are clearly stated in Chapter of Believers verses 12 through 14: "Then we put semen in a firm position." We change it into embryo and then meat and at last bone that has been covered by skin, and then created another creature. **So blessed be God, the fairest of creators!**

Imam Muhammad Baqhir (P.B.U.H) states: The semen takes 8 days to settle in the firm position and it is also the foundation of genetic science. Genetics is studying how much damage these small, though emotional, changes to the type of DNA and RNA on chromosome depletion cause! Therefore, according to the holy Qur'an, the following conclusions can be drawn from the following information:

1. Man is born of male and female gametes "God made man from a mixed material" 2. Sperm and ovule activate genes, "Then He Created man easily From Jumper water" 3. We should know the Egg Cell Growth Mechanism and Enzymatic Activity. (Believer, verse 14) 4. And That Man is the Inheritance of Parent Traits. "God is the Creator of every man and woman," so if the baby became black, if white, if born blind, if born deaf, it was a malignant trait inherited in the paternal or maternal genome that could be it in the first generation or in the sixth to sixtieth generation, that is, the child jointly inherits traits from the parents, and how beautiful and powerful God thought man the reality, God says very briefly that What makes you proud, man? Do you know you are the product of jumper water? the water that comes from mixing with other water which is very stinky and bad. Only God can create a good-looking human face from this stinky and bad water.

Of course, this debate has a great deal to do with reaching the full conclusion, since the purpose of this article is to present the scientific principles that were explicitly stated in the Qur'an and that we did not see others coming to our conclusion and we only monitored. In fact, we had a lot of shortcomings to the Holy Qur'an which goes back to ourselves.

The Holy Quran has repeatedly stated that we created plants in pairs! Gregory Mandel's first time on peasants concluded that there was a pairing relationship between plants and that the

progeny were quite similar to parents. On the other hand, there were problems in subsequent generations that indicated a recessive gene in one parent. His studies led to a revolution in biological science. Great biologists around the world gradually developed this knowledge and with the discovery of DNA, genetic science emerged, separated from biology, and accepted itself as a branch of natural science. The Holy Quran has very much referred to marriage and plant generations, which is easier for us to understand now. Today, there are many plants that have a separate male and female base, with flowers and fruits or other shrubs and eggs mingled with the new one and either the male or female. Like the kiwi fruit we all use. Like the lilac tree and many other trees.

In female-male intercourse, male genes are XY and female genes are XX, comprising 23 pairs of non-sex chromosomes and one pair of sex chromosomes, and when the embryo is to form a chromosome of female and one chromosome of male. To determine the sex of the fetus, it means that the person who has the X chromosome from the male will have a daughter, and if Y is the male the child is son, of course, sometimes have abnormalities in the process that lead to bisexuals or traits of masculine and feminine in men and women.



Looking at the XY chromosome, we find that the male chromosome contains both male Y and X chromosomes and the female X chromosome.

**Holy Quran in the chapter of the resurrection, verse 37-39 refers to this:**

"He had a sperm germ that was poured into the womb, then it became blood-stained, and God created him and arranged it and made him two male and female couples."

Also, if you notice that the person who has the Y chromosome is male and the male enters the Y chromosome then it is an effective factor in determining the sex of the male because if X gives birth to a daughter and if Y gives birth to a

son, in the past even Prior to the emergence of genetic science, it was thought that a woman would determine the sex of the fetus, but in the Holy Quran it was indirectly mentioned in the above verse.

### ENZYMES IN THE HOLY QURAN

Enzymes are generally biological catalysts for protein, which play an important role in the body, and increase activity by up to  $10^7$ -fold, taking various forms in this paper we consider two types of enzymes.

#### 1. The First Batch of Digestive Enzymes

There are a number of enzymes that are secreted in the pancreas, which are released from the duodenum to the stomach and play an important role in the digestion of the foods we eat. However, the amount of these enzymes should also be proportional to the amount of food consumed because Increasing and decreasing the amount of enzyme absorption and excretion of foods can be difficult. For example, fats and sugars require more enzymes in the digestive tract and the pancreas fits the food we eat.

2. The second class of enzymes used in DNA cloning that contains the genetics and nuclei of our cells, mentioned in Chapter One of the Pre-University Biological Book, such as the RNA polymerase enzyme play the role of transcription of two DNA nuclei. Bidel and Titum also pointed out that each gene exerts its effect by producing an enzyme. The following figures show the role of RNA polymerase in gene transcription.

In transcription, the first step of RNA polymerase replication partially cleaves a pair of duplicated DNA strands, in the second step, the polymerase RNA replicates like a train on the rails on the move and deoxidizes each of the DNA on the nucleotide, and then arranges them and eventually separates the DNA and Mrna made up.

In simulation that is a bit more complex, it is similar to transcription, except that the two strands are made from the first strand and the helices and lipase enzymes play an active role in this.

**It has been written in the chapter of Rome verse 28:**

God has given you an example: Do you ever share in the blessings we have given you, if you have slaves, as you are both equal and fearful of their own possession without their permission? ,

As you fear about free partners? We explain these verses to those who think.

1. At the beginning of the verse there is an example of yourself referring to the body and, as you know, enzymes have intracellular activity.

2. The second part refers to the blessing partner, which may refer to mixing food with digestive enzymes.

3. In Part III, two equations are mentioned, which may refer to the enzymes involved in the replication that separate and arrange the two strands.

Independent and unauthorized seizure is referred to later, which also means that it can lead to mutations, cancer and death if it is wrong, or manipulated by humans.

### THE HOLY QURAN AND SCIENCE OF HERBAL MEDICINE

Natural science, as one of the miracles of the Holy Qur'an, lies in the verses that these references have no harm to the Qur'an's instructive context, and only the great theologian's work (Allah) is to speak in such a way that his servants will bow down to him with all that progress, so respect him. It is not bad to know that Allameh Tabataba'i, in his book Principles of Philosophy and the Method of Realism, presents the naturalism of the Qur'an as follows:

In our time, the opposition to thinking and meditating on supernatural issues has taken on a new color: the color of sensory philosophy. As we know in Europe, the sensory and empirical method of knowing nature has prevailed over the deductive method.

After this victory, it was thought that the deductive method was nowhere valid and that the only reliable philosophy was sensory philosophy. The theoretical consequence of this theory was that theology should be declared suspicious, obscure, and undetectable due to its lack of access to sense and experience, and some would completely deny it. This was the process that took place in the Western world.

In the Muslim world, a history of opposing any thinking on the part of the holy sayings on the one hand, the success of the sensory method in understanding nature on the other, and the difficulty of pondering and solving philosophical problems on the third, make it difficult for a group of writers. It stirred and created a combined theory among them. That

theology can be researched, but in theology it is only necessary to employ the empirical method used to understand nature.

The group claimed that the Qur'an was the only way to know God, study the nature and the creatures using the sensory method, and any other way was in vain, for the Qur'an explicitly studied human beings in the manifestations of nature throughout their verses. - Which is impossible except by the intuitive method - has called the source and resurrection key in this type of study.

There is no doubt that the Qur'an invites a sensual study of nature and insists on it, but does the study of nature consider it sufficient to solve all the problems it has posed. Naturalism certainly informs us about the science, power, and wisdom of the creator of the world, but it is also about the maxim that it recognizes us that the creator of the world is aware of what he does in nature. And capable of them: "Is not the God who created the beings aware of their secrets, he is the God who is all-knowing inward and outward" (Kingdom, 1)

In this respect, he also wants us to have a higher knowledge, and that he is aware of everything without exception and certainly capable of all: "God has knowledge and science of all things" Anything is possible for God"(Cattles / 101) How do we find out about infinite science and power by studying in creatures that are limited anyway?

Natural and environmental knowledge is contained within the Qur'an, one of the best examples of which is plant genetics and reference to plant coupling. In the Holy Quran, more than 750 verses refer to nature; the various aspects of its effects and beauty are remembered. In most of these verses we are advised to read the Book of Nature and to teach it. Numerous verses of the Qur'an refer to the couples of fruits, plants and human beings. (Thunder / verse 3; Poets of verse7; Yasin, verses 36) The same is stated in verses 5, chapter of Hajj, and chapter of Lughman, 10 and verses 4-5 in chapter of Ghaf. God can create any kind of fruit and create everything in pairs. "

It is natural that God created the pair of all animals and plants in pairs and made the product of their slaves the result of marriage and reproduction of the male and female bases. There is no creature in nature that is outside this information, meaning that all creatures have a sexual reproduction process. In verse 49 of the

chapter of Scatter we read: "We have created two couples of all things; perhaps you shall remember."

And in verse36 of chapter of Yasin God says, "Greatness is just for God who created all the couples from what the earth goes, and from themselves and from things they do not know."

This verse explains more clearly the extent of the couple in plants, humans, and objects that are beyond the reach of human science. Many commentators, since they have not here understood the meaning of marriage in its true meaning (both sexes), have interpreted it to mean the various traditions of worldly creatures that have become evenly coupled, such as day and night, light and darkness, the sea. And the desert, the sun and the moon, war and peace, and so on, but today we find a more accurate interpretation of these two verses, because scientific research has well established the fact that all matter in the universe is made up of very small components called the atom, And these components were previously known as unbreakable, and therefore the name "atom" means unbreakable. From here with the help of human science, the broken atom and atomic energy and related industries started from here.

When they split the atom, they identified it as composed of the most electrons and protons, making it a more precise sense of the couple in all the particles in the universe, namely the two "male" and "female", "positive" and 'negative' was achieved with no exceptions, while the interpretation of earlier scientists was not only incompatible with the concept of parity, but also with many exceptions.

In the five verses of the Holy Qur'an, couples are mentioned in the world of plants. In verse 10 of chapter of Luqman we read: "We sent from the blue sky and by means of it there arose precious pairs on the earth of every plant." And in verse 5 of the chapter of al-Hajj, it says: "You see the earth dry and dead, but when we send rain on it, it moves and grows and creates every beautiful pair of plants."

In verse 53 of chapter of Taha, we read: "And from heaven he sent down water, by which we brought forth pairs of different plants from the earth."

It is true that in the past humans were more or less aware that some plant species had a male and female type and were used to fertilize them by inoculation (especially the palm tree in which the male and female were known in the past,

and By fertilization, they were fertilized), but for the first time in the mid-eighteenth century a famous Swedish scientist and botanist named "Linnaeus" announced that couple (male and female) in the world of plants is a common issue and plants are also common. Most animals are fertilized by the mating of the male and female and then bear fruit. But as we have seen, the Holy Quran twelve centuries before said the truth, before scientists had unveiled the mystery, the holy Quran in many cases referred to couples in the world of plants.

Interestingly, the plants are different in that many of them are male and female, and in others, the male is separate from the female, so in chapter of Taha the verse 53 God refers to "reproduction or fertilization", and the issue of "plant couples" is also mentioned in the chapter of Thunder (verse 35) And God says, "Glory be to God who created the whole pair, whether you go out of the earth, the people themselves, or the pairs that do not know it."

Pairs that humans are either unaware of or have recently become aware of them, such as pairing between viruses and even atomic particles that have a positive neutron charge and a negative electron charge, or can be a mechanism such as viruses, nematodes, and fungi. Their reproduction and their pairing are plausible nowadays, but for those days it was difficult. With the advent of science and the development of new technologies and the production of new technologies, human beings are beginning to realize that they know nothing, and that the circle of human science is limited enough to access all the sciences at once and inevitably take time to unravel the facts. Better scientific information is available to everyone.

### WHAT DOES THE HOLY QURAN SAY ABOUT BEES?

The word "نحل" means honey bee in verses 68 and 69 of chapter of Bee in the part 2 of the Holy Quran. God says: "Your Lord sent revelations to the bee!" Then God says about bee and honey, but it is in the form of divine mission and mystery inspired by the name of Revelation. The first says, "And your Lord inspired the bee to choose houses from the mountains and the trees and scaffolds that people make."

The first mission of the bees is mentioned in this verse, housekeeping. This is perhaps because the issue of affordable housing is the first condition of life, followed by other activities.

In verse 2 of Bee, the second bee mission begins. The Qur'an says: "We have inspired him to take full advantage of the fruits and follow the paths which your Lord has ordained for you."

Finally, the final stage of their mission, as a result, states, "Within the bees, a special beverage comes in a variety of colors." It is noteworthy that scientists have come to experience the fact that bees are skillful honey maker as the medicinal and therapeutic properties of the plants are fully preserved and transferred to the honey.

In the story of the bee-hive and the valuable gift they bring to the human world, which is both food, healing, and the lesson of life, is a clear sign of God's greatness and power for the people they think about. As it turns out, one of the tasks of the bee is to suck the sap of flowers and plants to produce honey in the first stomach of the bee. Honeybee with scientific name: "Apis mellifera" and a part of "Hymenoptera". The bee has both rodent and sucking mouth parts. Its transformation is complete and lives collectively in three categories.

1. The Queen who lays eggs.
2. Masculine (prones) is just to fertilize new queens.
3. Workers are infertile and often have many types.

The bee hive is either in 2 cm cubic boxes called a modern hive or in a basket called a native hive. The bee's body is densely covered with hairs that have short side barbs and easily catch pollen grains. In compound eyes and legs, there is smooth hair. The front legs on (tibia) have short, rough, straight hair and are used to cleanse the eyes from flower pollen and are called Eye bursh.

The wings of the bees are intertwined with hooks or fly wings when flying and the tip of the wings traverse the shape. They may vibrate 3 times per second. The mandibles or lower jaws are used by smooth workers to collect pollen and make branches. The upper jaws or (maxillae) are like long spoons and are used to collect pollen.

The lower lip is transformed into a dorsal and surrounding sensory appendages or (Cabalplas). Nectar fluid is drawn into a large stratum or honey stomach (Money Stomach) as a result of suction. Four triangular lips open the valve and prevent honey from entering the stomach,



except when needed for nutrition. The intestine of the bee is narrow and elongate, with about 100 small tubules, the malpipe, and the rectum is large, ending in anus. There is a needle at the bottom of the body that can only be seen in workers and queens. The sense of smell in bees is very strong and sharp, and the eyes have a large number of visual units and have a relatively large brain: bees are not able to distinguish between red and black.

Surely God has not unknowingly nominated the bee for the study of his servants. Their collective life and order, as well as the pairing of plants and the production of honey, all reflect the greatness of the Lord God and the natural and genetic issues in which these insects are involved. Apart from the fact that the bee itself has a reproductive cycle and the bee reproduction is highly targeted, that is, the queen is very intelligent. She lies on the side she feels more needs. For example, if a soldier is low, she lays eggs to the side of soldiers, if more workers are needed she lays eggs to the workers' side, and only God knows the great secret, God knows how a little insect hopes for the future, and how beautiful it is in the future. In the reproductive cycle of nature bee plays a great role, sending the flower's love letter to another flower pollen, and her love book is always open thanks to the grace of God, and God has placed this insect as an angel of coupling between plants and flowers.

### CONCLUSION

The basics of genetic science are the reproduction and division of parental traits into children, which dates back two centuries. We are now aware of the misconception that doctors in ancient Greece and Iran believed that by semen a small man enters a woman's womb and that women are ineffective in generating and surviving a nine-month-old child. This belief was invalidated by the discovery of this science, and is now forgotten because researchers today they are also studying the greatness of the woman, that is, the woman can become a hundred percent pregnant without the intervention of a man, and in fact they are going to war with God, according to Professor Ashmith, that we, like Mary Jesus, can also create a baby without father. Let's say, but this has not worked and the efforts of the researchers so far have not worked. Whatever man produces or does not do is essentially God's work. It is God who, through His grace, transfers some of His knowledge to His servants or achieves such

a success at His will, so His pride of creation is nothing but ruin to scientists, and the only Creator is uniquely God who can do whatever he wants, just if God says "be" then it will exist.

As mentioned, the basis of genetic work based on reproduction and the role of couples in determining the inheritance of the attributes that God has set forth in the Qur'an not only about man but also about plants and other things that we do not know that could provide sexual reproduction Viruses, microbes, bacteria, fungi and nematodes and all kinds of insects and so on.

There is an insect called Praying Mantis, which God has made unique. As the male goes toward the female, he looks at the female's hands, asking for a literal hand if she raises her left hand means she wants food, and when she takes the food, the male again looks at the female, if she raises her right hand, allowing him to mate. When the mating is done, the female will eat the male. God has placed so many complex creatures in the nature. Suddenly man remembers the greatness of Allah who says: "And pairs that you know nothing about them."

So with the advancement of science, the Holy Qur'an is the only book to be updated, in contrast to the Torah and the Bible, which believed in the flatness of the earth and somewhere in the name of the end of the world and forced Galileo to say I made mistake, please don't torment me. But the holy Qur'an is a book of wonders, a book that brings a newer miracle every day. Truly, if one wants to write about natural sciences or the same genetics and the foundations of genetic science in the Qur'an and Islam, there will certainly be a bulky book or some book covers.

The holy Qur'an is not a mere scientific book; it is a unique book which train man toward the best and graces. It has all sorts of surprises and wisely, philosophically sayings in the humanities and even math and other applied sciences. Holy Quran is a miracle, heavenly book which is full of mysteries that every day man discovers one of them. Only our Lord knows what he says and what he creates.

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