

Plants rights foundation from Islamic perspective

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ABSTRACT

Certain principles from the Holy Quran can enable scientists to follow human ethics about medicinal plants. In this research, we used references such as the Noble Quran, "Al-Mizan and Nemone" interpretations and Islamic jurisprudence books such as Wasayel-al-Shia. Some Quranic verses include definitions like "the source of admonition, happiness and rejoicing" furthermore, one of the important goals is to consider the wisdom of God. Empirical experiments indicated that plants also possess a high level of understanding of their condition. In the Quran, the plants such as *Punica granatum L*, *Zingiber officinale L*, *Vitis vinifera L* and *Phoenix dactylifera L*, which are used in traditional medicine, are important. From the perspective of Islamic philosophy, plants are capable to benefit people in various ways, by perception, consciousness and emotions and Islamic law does not allow humans to destroy plants. And also articles that indexed in Scopus, PubMed, ISI and Google scholar.

Keywords: Plants rights, plant perception, foundation, the noble quran, creation

INTRODUCTION

Most medicine has pharmacological effects, central effects and environmental side effects such as hepatic or cardiovascular complications. Medicine without side effects has not been introduced to the world yet. Plant-based medicine used for treating complications and diseases such as pain, cancer, viral and cerebral disorders is one of the research priorities today [1]. The amount of research related to plants has been increased as they contain natural antioxidants as well as other beneficial constituents [2, 3]. While making efforts to get plant-based medicine, it is possible to ignore certain issues in planting, crop management and harvest stages changing the environmental principles with the plant. Quran is a vast and unique collection, with delicate points, including hygiene and human health [4]. One of the miracles of the Quran is the impact on health matters [5]. In some chapter of the Quran, is mentioned significance of medical plants [6]. In this research plant preservation and protection were tackled using Islamic books such as the Novel Quran and the relevant interpretations were reviewed.

MATERIALS AND METHODS

All the collected data were based on the electronic and non-electronic library references

were extracted from papers, reports and books like the Holy Quran, Al-Mizan, Nemone interpretations, Islamic jurisprudence books such as Wasayel-al-Shia, medicinal herbs references like "Materia medica" and also articles that indexed in Scopus, PubMed, ISI and Google scholar and the experiences resulted from ten years of study and investigation as to plants and various indigenous species.

RESULTS

Herbs have been used as folk medicine in Quran in view of various beneficial ingredients and properties. Furthermore, they play a significant role in providing nutritions and taking care of human health [7, 8] which many researches have been carried out.[9, 10]. Many of them are even regarded in some chapters of the Quran, such as Surahs Tin, Baqara, Anam, Mumenuon, Kahf, as having many pharmaceutical and medical advantages [11] like (*Punica granatum L.*) the oral and antioxidant properties of pomegranate [12], the anti-inflammatory and anti-edema properties of grape plant (*Vitis vinifera L.*), liver protective, antimicrobial diuretic properties, and others such properties as opening the bronchi, relaxing the blood vessels and muscles [13]. Additionally, other herbs such as fig (*Ficus carica L.*), date palm (*Phoenix dactylifera L.*) and

Zingiber officinale L, Which are used in traditional medicine [14] Honey are cited in Quran for their energetic and healing properties and their effective role in the internal systems of the body [12]. In the study by Fathi et al, it was founded that students of Mazandaran University of medical sciences were familiar with Quranic herbs. They also reported using these herbs [16].

The principle of plants creation

In many Quranic verses, the creation of plants is pointed out by Allah and through phrases such as " Gazing-stock", and "The Source of happiness". In Quran, it mentions that all creatures including plants are created and the creation of plants is reminded us the God

The principle of worship

This principle refers to obey the Devine rules. Prostration does not mean lying down; rather it symbolizes the apex of obedience to modesty before God.

The rights for Life

Plants are the creatures of Allah and have the right to live, a right man is not allowed to disregard.

Understanding and perception

Certain important researches have revealed that plants show a high level of understanding and perception of their position and surroundings.

The principle of judgment and resurrection

According to Islamic philosophy resurrection refers to a higher level of existence. For plants, this ascension means to be eaten by man or animal and turn into an element. Besides, plants possess 2 spirits; the vital and the vegetable spirits.

Explanation of Findings

The principle of plants creation

The principle of plant creation is pointed out in the Quran, verse 72 of "Al-Waqi'ah" Surah: "Is it you who grew the tree or we grow it?", and verse 60 of "Naml" Surah: "Allah is the one who created the earth and the heavens and sends down rain for you? With rain, we grow green gardens whereas it is not possible for you to grow vegetation and trees of the garden" According to "Nemone" exegesis, human's task is to sow seeds but the one who sends the drops of enlivening rain and orders the soil particles to make it germinate is Allah [17]. In the verse 5 of "Al-Hajj" Surah, some interesting peripheral issues are mentioned about the importance of plants:" and you see the earth is dry and lifeless but when we send down the rain, it comes to life, swells and produces every kind of fruit."

In this verse and verses with similar themes, the germination, growth and production of plants all are symbols of the power and wisdom of Allah.

For example, verse 11 of “Nahl” Surah "There with He brings forth for your plantations, olives, palms, grapes and all kinds of fruits and corns. Verily in this lesson is a sign [of Allah's power] for men ".

The principle of plants prayer

Verse 18 of “Al-Hajj” Surah: "Have you not observed that in Allah's Presence prostrate themselves all things that are in heavens and on earth, the stars, the moon, the mountains and the trees. The animals and many people prostrate themselves to Allah".

Based on “Nemone” exegesis, this prostration is universal. In addition, four-fold service, namely praise, prostration, thanksgiving and prayer are not limited to mankind, rather to all plants, animals and even lifeless creatures [18]. Verse 6 of “Al-Rahman” Surah "The herbs and the trees prostrate themselves in adoration to their creator."

By “Najm”, many narrators mean herbaceous plants. The purpose behind Shajar, meaning tree, is that it stays firm and whole even in the winter [18].

Regarding “Majma-Al-Bayan” exegesis, plants prostration is pure obedient to God [19]. In Al-Mizan exegesis, Allame Tabatabaee considers the intention behind “Sajde” (prostration) as the plants growing and developing and getting rooted in the earth for nutrition [20].

In “Nemone” exegesis, the concept of “Sajde” (prostration) is the plants unconditional surrender to Allah's decision for the benefit of humans since all foods are directly or indirectly supplied by plants. In addition, this verse points to the theistic mysteries of plants, because there are weird signs of the creator's knowledge and greatness in every leaf, seed or each part of the plants [18].

All creatures are busy worshipping their Creator, the real meaning of servitude being absolute obedient to Allah and absolute observance of the natural laws.

Understanding and perception in plants

The existence of perception and thought in plants has been one of the most controversial issues among the botanists. It was in Indian Mongolian emperors’ times, a scientist called Tenson stimulated the blooming of the flowers by playing a kind of musical instrument. Many believed that sugar cane grew in response to the commuting melody of bugs and wild bees. Charles Darwin who proposed the disputable experimental theory of evolution; studied plants tried to influence them (*mimosa pudica as an example*) by playing the clarinet , yet he got no sufficient response in order to build a theory. Wilhelm Pfeiffer, the German physiologist, had a similar unsuccessful experience regarding stimulating the stamen of a plant called signore

in 1877. However, the scientist proposed some robust evidence concerning the fact that plants have feelings and can react to events and actions. Cleve Backster, an expert in operating polygraph who was the first person to prove plants' perception, shocked the scientific community by presenting his observations on the sensitivity of plants.

Cleve Backster assumed that as water climbed up in a plant, its leaves got saturated and the electric resistance of leaves will reduce. He also connected the electrodes to a person's fingers

Cleve Backster examined the reaction of the plants during an hour where nothing significant happened except that a descending line was drawn by the polygraph ink mark on the paper, so much that it induced a human like feeling. In fact, when watering the plant in the pot, Cleve Backster saw that a sensation similar to human satisfaction was produced in the plant.

Actually, at that time the ink mark left an ascending line on the paper.

The next step was slightly unusual, Backster intended to discover whether the plants would exhibit any negative reactions to a negative action based on the presupposition, which an action led to a person's mental and physical relaxation, it would make the plant satisfied. Backster was aware of the fact that an acute and exciting action, such as fear and anxiety would provoke immediate reaction in people according

to polygraph, so now he wanted to know if such reactions were true about plants. He decided to burn a leaf in a tea cup; no reaction was elicited from the plant.

He repeated the experiment with a leaf connected to the electrode. He used matches to burn the leaf. Backster's new experience was far more unbelievable. When polygraph was drawing, he demonstrated some signs of anxiety.

Backster concluded that the superior perception of the plant existed at cellular level and proposed the experimental theory based on the mysterious perception. Moreover, in some of his experiments, he intended to know all parts of a plant reacted to the external stimulations, and so this issue made it clear that perception in a plant may be at cellular level, a theory known today as "Backster Effect". Six people assisted Backster in this research, one of whom suggested that plants would react to unpleasant behavior. Another assistant of Backster was in charge of burning one of the two plants growing shoulder-to-shoulder beside each other. When he approached the plant, it exhibited a violent reaction. At the time, the other assistants stood close to the other plants which were not to be damaged. However, this plant reacted only when the person responsible for burning the first plant got away from it.

In another experiment, Backster studied other tissue like those of fruits, vegetables and even the

tissue taken from human body where the diagram drawn by polygraph indicated that all live tissue species seemed that they had the same potential in responding to external stimulations [21].

The principle of judgment and resurrection

With the existence of resurrection, understanding and perception in plants, we will reach the idea of plants worshipping the God. It is patent that human shoulders feel a great responsibility for his behavior and actions towards the creatures worshipping the God

For this reason, cultivating and bestowing life upon plants has been introduced as servitude or worshipping. The holy prophet Mohammad states: "If the doomsday comes and one of you holds a sapling in your hand, you won't be able to stand unless you have planted that sapling. "This tradition denotes the significance of cultivating and giving life to plants. Cultivating a sapling or a young tree is one of the charities in which recompensing and blessing are eternal. Such charities and virtuous deeds are called ongoing charity: "Five groups own perpetual charities whose reward is continually recorded in their books of deeds. A person who plants a young tree; the one who digs a well; the person who builds a mosque for the sake of the God; the person who inscribes Quran; the one who leaves a pious child after his death"[22].

In a narrative by Imam Jaafar Sadigh, a person once asked his majesty: "some people say farming is abominable". Imam retorted: "Do plant trees and do farm since there exists no action cleaner and more lawful than it. I swear to the God that planting trees and farming will have become highly prevalent" [23]. On the importance of planting and looking after plants, the holy prophet Mohammad states: "everyone who plants a tree and patiently take cares of it , and so it yields fruits, one charity will be bestowed by Allah in exchange for each fruit"[24, 25].

As much as planting a tree, bestowing life upon it and caring for it is considered a good deed in Islamic teachings, cutting trees and destroying plants are reproached. Imam Jaafar states: "Do not uproot fruit trees otherwise Allah would punish you. "In legal terms, there is a law named "no injury or damage" which points to forbid humans from damaging themselves, each other, animals, plants and the environment too. Sheikh Ansari, Akhond Khorasani, Agha Zia Araghi have written about this law [26]. As much as giving life to a living thing has abundant reward for human, cutting it can bring about punishment. The issues related to the creation of plants which have been analyzed in Quranic verses in two axes:

Admonition for human beings

In verse 99 of Surah "Al-An'am": "Allah is the One who sent down water from the sky, and with it, we bring forth the shoot of every plant, and then we bring forth its green leaf, from which we produce closed-compounded grain; and of the palm-tree, from the spathe of it, come forth clusters of dates close to hand; and we produce gardens of vines, olives, and pomegranates. Look upon their fruits when it yields fruits and also ripens. Verily, in all these are signs of Allah's power of creation for those who believe."

According to Allame Tabarsi book, there are some transparent signs in the creation of plants and fruits regarding the variety and bewildering accuracy and prudence used in their creation for those who believe that all plants have a creator who has created them in this form with science and a planned goal [26, 27]. Based on "Nemone" exegesis, this verse points to the primordial mother and the origin of blessings, plants. In this verse, Allah mentions the growing and shooting of plants, then the genesis of seed in plant and after that yielding fruit. Of the manifestations of the power of the God is that despite various trees and plants, in most cases, they exist in similar compounds of soil and consume the same nutrients, there are many varieties and differences in terms of their flavor, kinds and function. This variety is another manifestation of Allah's might and creation. [28]. Verse 11 of

"An-Nahl" Surah, reads: " He brings forth for you plantations, olives, date-palms, grapes; all kinds of fruits and seeds. Actually, in this, there is a sign for men of thought". Based on such verses and their interpretations, the origin of the majority of the blessings is plants. Plants are at the bottom of the food chain, most living things nutrition and life depend on plants. The order behind the world of plants has been referred to as "well-balanced "in the verse 19 of Surah "Al-Hijr": "We spread out the earth, placed firm mountains and grew there all kinds of things in proper balance and proportion."

Therefore, man has to pay attention to the wonders and the mechanism of plants, and so in this process, they can discover the wisdom of Allah.

Source of happiness and joy

In the verse 5 of the Surah "Al-Hajj" Allah says: "you see the earth is dry and lifeless, but when we fall down the rain on it, it becomes alive, swells and produces every kind of fruits and vegetations." The germination of plants on earth results in joy and freshness in humans; plants provide nutrition for many animals and are one of the main food supplies for people. God presents the germination and growth of plants and the creation of picturesque lands capes to remove the suspicion about the existence of resurrection. An identical theme has been stated in the verse 60 of Surah "Al-Naml": "or

Allah the One who created the heavens and the earth and sends down the rain for you? With rain, we grow glorious gardens whereas it is not possible for you. "The significance of vegetation is so much that in Surah "Al-Anfal", they are introduced as the assets within the authority of the Islamic government.

CONCLUSION

The plants do not have human-like speech and thought, they have benefited from the perception and consciousness and emotions. For this reason, Islamic law doesn't allow human to destroy plant life. And if using the plant as a medicine, preferably the active element of the plant should be directly eaten by the patient to become a part of the human being.

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