topic:

fantasy world of plants

author:

彭嘉姗 Daisy。新營高中。二年三班
蔡緻儀 Bella。新營高中。二年三班
I Introduction

We are crazy about plants and love plants. On weekends, we get together to observe plants in the parkas and florist shops, etc. Observing plans and discussing plans are our daily routine. All of us believe that plants have emotions and feelings, can understand what people say and will be influenced by what people do. However, “Don’t be silly. They can not move, talk and even protect themselves, let alone have emotions and feelings.” many people said.

Lots of criticism cannot get us down. By taking part in this competition, we learn more about plants and want to prove that our viewpoints are meaningful. People always think that they themselves are the best creatures in the word, but in 1966, Backster’s experiment thoroughly overturned people’s thought. The observation revealed that plants had innate intelligence. When you speak some good words to plants, they grow particularly well. Not only did one experiment change our mind but many scientists devoted lots of time to finding more secrets in plants. Exactly, the plant field has such interesting matter for humans to discover. Now, let’s walk into some study results and enjoy the feast of knowledge about plants.

II Thesis

2.1

Plants play an important role on earth, and they are omnipresent. However, to many people, plants are nothing but just green creatures immovable and swaying only in the wind. What a pity that most people define plants only for food or appreciation. In fact, using your free time and opening your heart to observe plants seriously, you will have some surprising rewards. What situation of ideas comes into your mind when you think of plants? Some people might answer “the photosynthesis.” Now we will look at the plants from another angle.

2.1.1 The pulse of plants

Some scientists studied the growing speed of trunks; afterwards, they found out that plants had some behavior resembles the pulse of humans. The circulation of moisture in the plants arouses the beating of pulse causes continues again and again every day. If the plants absorption of moisture is more than their evaporation of themselves, the trunks will enlarge. On the contrary, the trunks will contract. The most special thing is
that in the rainy days, the trunks will enlarge continually no matter what time it is. After the situation is cleared up, the trunks will start to contract again. [註 1]

2.1.2 The secret of blood

Do plants have blood groups? Of course they do. The scientists have had some chemical examinations about plants. The plants which bespoke blood groups were about seventy-nine kinds. The blood type of half of them was O, and the one of the others was either B or AB. In addition, the color of plants’ blood is not red, and they even don’t have red blood cells such as human beings’. How do plants declare blood styles? By one chemical material called glycophorin. Different kinds of glycophorin represent different kinds of blood groups. Not only do the glycophorin represent the blood groups but also can store energy and protect plants. Through circulation of body fluid, the plants can finish the assignment of carrying nutrition and exhausting offal. Moreover, the surfaces of body fluid are distinct structures and the secrets of blood groups of plants. [註 2]

2.1.3 Eyes of plants

Vines climb upwards. Once finding struts nearby, vines will catch the object tightly. If their struts are moved, their tendrils will search the other object immediately. How do the plants detect? The studies show that there is a receptor such as retinas in its leaves. It can absorb blue light deciding the plants’ directions of movement to the sun.

The scientist also discovered that in plant tissue there were two kinds of phytochromes which told intension of sun light. With this ability, plants can detect the lengths of wave which human beings can not see. Using the phytochromes, plants can perceive the alteration of environment. To adapt to the changes of environment, plants would release some hormones or change the way deliver and store the nutrition. For example, if plants realize that they are surrounded by other plants and need more sun light, they will take some nutrition from their roots to their fruits. This behavior can improve the chances of breading. Taken altogether, the phytochromes are the eyes of plants which help them keep away from dangers and adjust the changes of the environment. [註 3]
For many modern people, to the general knowledge of science, it is taken for granted that with the cerebrum, people have senses and awakening. However, the example below gives us the different explanations.

2.2.1

In Britain, there was an oaf that was born without the cerebrum. While many doctors were holding his life diligently, they found that, by accident, though he didn’t have the cerebrum, he could make reception like the normal children. For instance, if he saw the funny picture on television, he would laugh, too. [註 4]

2.2.2

There was a genius of math with a very high intelligence quotient. Afterwards, the scientists analyzed his cerebrum and then discovered that the part below the brainstem was abnormal and the structure of his cerebrum was different from the ones of other people. [註 5]

2.2.3

In 2001, a publication also reported that in America, there was researcher investigated into the dementia and Parkinson’s disease. Once, he tried to research a Sister’s cerebrum, and then, to his astonishment, he detected the neurons of her brain twisted together. Generally speaking, it was the phenomenon caused by the sickness; that is to say, the cerebrum had withered. Nevertheless, that Sister actually was able to live to over one hundred years old, and her consciousness was clear in the ordinary days. Besides, she could even speak as smoothly as she did in her early days. Then, where did her wisdom come from? It is unthinkable. [註 6]

2.2.4

Some results of investigations into the death showed that the people close to the dead condition could remember everything happening when rescued. However, after the rescue, those patients all remembered the things before they had been rescued and even saw the process while the doctor was curing them. [註 7]
Those people in the example above still behave normally without thinking the activity of the cerebrum. According to these facts above, we can draw a rudimentary conclusion that people’s perception and cerebration are not absolutely related to the cerebrum and nervous system. Although plants do not have those, many biologists still think that plants have cerebration and in their body might exist some substances which humanity has not discovered and which can govern those great functions. Because of the inferences above, we can believe the idea “Plants have ability to think.”

In the twentieth century, the experiment on the plants which many scientists and biologists invested a lot of time and effort in originated from an unwitting act that was done by Cleve Backster who gained a surprising result and made up his mind to uncover these riddles. Later, he constantly operated numerous similar experiments. The examples below are all the phenomena which were observed by Backster with the polygraph.

2.3.1

Once, Backster connected the polygraph and a plant to know what reactions plants would do when being watered. According to the common condition, the absorption of moisture would cause the increase of resistance and an upward cover line on the paper. However, he found that the result was contrary to his assumption; the hound's-tooth which should turn upwards became downward on the record paper. This reaction from the plant was the same phenomenon as people’s when flushed. As a result, we can believe that plants would feel excited because of moisture. [註 8]

2.3.2

With the former experience, Backster considered that the method which threatened the humans would give them the feeling of fright. For this reason, he put leaves of a plant into a cup of coffee, but nothing happened; then, he decided to burn the leaves which were connected with the polygraph. Without any actions of burning, he had this idea in mind, but the plant still could catch his thinking and felt frightened. We can see the signal of the plants’ reaction, a rapidly-rising curve line on the paper for recording the plants’ reactions. After he took the matches back, the line raised higher again. He thought that the plant might be scared because of knowing what he would
do. Afterwards, Backster and his colleagues performed many experiments with other instruments and plants around the country and obtained the same result. [註 9]

2.3.3

One day, Backster connected the polygraph and a plant and asked a person about his date of birth in front of that plant. Backster told that person seven ages among which one of those was correct, but he let that person disclaim all of them. Finally, as the correct answer was disclaimed, the paper for recording the plants’ reactions presented a high line. Therefore, he discovered that plants also could tell whether people lied or not. [註 10]

2.3.4

Backster put two plants in the house and told six students to draw lots to see who should pull one of the two plants up by its roots and tread on it. Later, every student walked in front of the other plant which was connected with the polygraph, and Backster found that only as that student who trod on the plant walked by, the electronic pen started to move up and down greatly. It demonstrated that plants had the abilities to memorize and recognize who the murderer was. [註 11]

2.4 The expression of plants

For human beings, plants seem to live on earth silently. They belong to the land where the seeds take roots forever. Even if the environment changes, they are still unable to move one step. Are plants not able to express themselves and protect themselves?

In 1970s, an Australian scientist accidentally found out that plants will make snapping sounds when suffering from the serious drought. After the survey, the scientist realized that this tiny sound came from the quaking of the tiny pipeline for the water distribution in the plant. [註 12]

With this important discovery, American scientists, Glints and his co-workers carried out an experiment in the canyon during the drought; they used high tech remote device to monitor the growing plant. The result of the experiment was that while the photosynthesis inverted nutriments into the materials for growth, the plant will evolve one kind of electric signals. [註 13]
By the international cooperative research, the electric signals, “the language of plants”, were concerned with some special chemical substances changing with the environment. For instance, under the situation of typhoons or droughts, plants will emit the dark, drastic or terrible sounds; when plants suddenly feel light in the dark, they will emit amazed sounds. [註 14]

Consequently, through all the results above, it might be that plants have the same strong feelings such as happiness, sadness, and anger that human spirits have.

Cleve Baxter, the CIA expert of lie detection, took advantage of electrode of lie detector to observe the speed of the plant roots absorbing moisture and accenting to leaves. He fortuitously found that the pictures of monitor resemble the marvel of people accepting stimulation in a short time. [註 15]

Next, he continued to make an experiment by burning one leaf and discovered the bitter wave amplitude from the monitor which represented that plants have terrified psychology. However, if they just made a fire but didn’t burn the leaves, plants would feel that their action didn’t show any minacity. What’s more, that lets the form of wave be smooth. [註 16]

At the same time, the scientist, Victor, applied the computer meter to attach the one who was under hypnosis and the leaf of one plant under the sleep condition and told something delightful or bad to them both. Through the records of computer monitor, they knew that the form of wave from human beings was the same as the one of the plants. Besides, when the Connor felt cheerful, so did the plant whose leaves extended. On the other hand, as the Connor felt sorrowful, the leaves would droop in sympathy. [註 17]

In 1973, the scholars, Peter Tompkins and Christopher Bird, wrote “THE Secret Life of Plants” which contained lots of facts about the feelings of plants and won overnight fame in the scientific field. [註 18]

Plants must have some abilities for communication; for example, to warn of dangerous situations among them. Herbert Wither, the biologist and physicist, studied plants and pointed out that plants passed information to one another by sounds, energy or light. Finally, by means of the analysis of expression signals produced by those plants, he realized that the frequency was so high that people can’t hear it. [註 19]
Conclusion

For us, plants are advanced creatures, not only something plain for humans to eat or appreciate. Like humans, plants have languages, feelings and the abilities of protecting themselves.

First, during the process to write the essay, we still doubted lots of questions about plants, though we thought we knew plants a lot. Through searching the information we need for the essay, we found many results from the studies to explain our questions about plants and redefined plants as spiritual creatures.

Second, via this chance, not only did we learn how to write an essay but also know more about the lives of plants and numerous interesting concepts about plants.

Third, we corrected some wrong point of view and are fonder of plants. In our opinion, for human beings, plants are just our friends and accompany us through our whole lives.

Fourth, through writing this essay, we think that plants have languages, pulse, blood types, and eyes like humans as well. Therefore, we think that everyone should treat plants as other animals, protect them and treasure them. Cherishing plants is the action of conserving the earth and protecting the right of subsistence about every creature. And everyone should see plants as their family, love them and feel the mystique of them.

Therefore, we wrote this essay to show our greatest respect for plants and expected to introduce more about plants for people.

Figure 1. This is generalized from the results of the experiments in the essay.

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### References

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