

Plant and Bacteria Communicate

Some people talk to their plants. But what do you say to a bacterium? Evidently, the soybean plant knows just what to say to make bacteria its close friend and helper.

Symbiosis means a relationship between two different creatures in which they both help each other. Plants need nitrogen for healthy growth. However, while there is more than enough nitrogen in the air, plants normally can't make use of that nitrogen. Legumes, like soybeans, link up with bacteria that are able to take nitrogen from the air and turn it into a form of nitrogen that plants, including the soybean, can use. In return, the plant creates a nice home for the bacteria in nodes in its roots and provides the bacteria with food.

The bacteria need a great deal of oxygen and energy to fix nitrogen into the soil. The oxygen is supplied by heme. If that name reminds you of the hemoglobin that carries oxygen in blood, you're on the right track. That's why the heme in the nodules turns them reddish. Who makes the heme, the soybean, or the bacteria? When alone, neither creature has any heme. Researchers have learned that the plant performs the first part of the chemistry needed to make heme and the bacterium finishes the job. The plant and the bacterium actually communicate chemically with each other so that production goes smoothly!

Communication between such different creatures, allowing them to perform sophisticated chemistry to improve both of their lives, shows how inadequate evolution is to explain life. This arrangement surely glorifies the Creator!

Ephesians 2:8-9

“For by grace are ye saved through faith; and that not of yourselves: it is the gift of God: Not of works, lest any man should boast.”

Prayer: Dear Father, without Your communication to me in Your Word, my life would be without the cleansing benefits of my Lord and Savior's blood. I thank You that my salvation is without my effort, which could never be enough. Amen.

REF: Pennisi, E. Intimate chemistry of a symbiotic odd couple. Science News.