

A bacteria which could help to decompose lignin biofuel refining

British researchers report that they have discovered a bacterial decomposition of lignin in wood and other plant capacity , which helps crops using tree branches and stems left after harvest to refine biofuels.

Tree branches and stems of many plants usually contain a large number of difficult to decompose lignin , so use them to refine the efficiency of biofuels will be greatly reduced .

University of Warwick researchers and other institutions in the new one , " biochemistry " magazine reported that one kind of Rhodococcus might be able to help solve this problem, because it secretes an enzyme having the ability decompose lignin .

The researchers said that had previously been found that certain fungi can also secrete similar enzymes, but this study is the first discovery of bacteria that secrete the enzyme . Relatively easy to cultivate the bacteria , and this has already Rhodococcus genome sequenced , can be more convenient to use genetic means to change the bacteria , so that large-scale production using enzymes decompose lignin .

Study leader Professor Timothy Burg said that now the direction of the development of biofuels is not a conflict with food production , but the use of such waste stalk biofuel refining , results of this study are expected to be used in the degree of industrialization lignin decomposition mass , very useful in the development of biofuels .