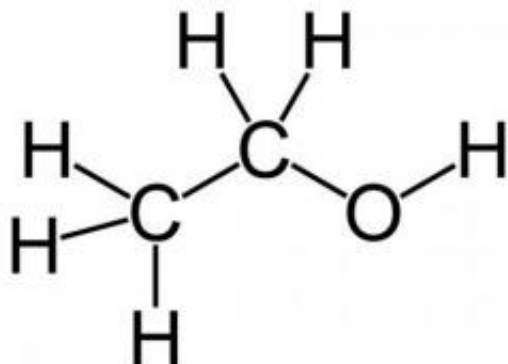


Microbes to Take Over Ethanol Production?

November 20 2009, by Miranda Marquit



Credit: Ben Mills via Wikimedia Commons

(PhysOrg.com) -- Not too long ago, it seemed that ethanol production was the wave of the future. The use of trash, wood chips or different types of plants -- usually grass or corn -- to make ethanol was considered a way to help reduce reliance on foreign oil. However, investor interest in the process cooled, especially since it turned out that some materials were not terribly efficient when it came to producing ethanol. However, wood chips are once again being considered in the quest to create an industry based around cellulosic ethanol.

The company behind the push is ZeaChem. The company wants to use termites (or, rather, the microbes found in their stomachs) in the [ethanol](#) creation process. [CNET News](#) reports on the efforts of ZeaChem to create a new method of [ethanol production](#):

ZeaChem's process is different from many other companies in that it uses a bacteria called acetogen, which is found in termite stomachs, to break down [biomass](#) without the use of enzymes.

The company contracted with Hazen Research to construct the facility, which will be built using different modules that can be transported in truck-size containers, said Imbler. The goal is to have the operation online next year making both ethanol and specialty chemicals, including ethyl acetate.

ZeaChem plans to look to pharmaceutical companies and even oil refiners as partners in the effort to build an ethanol plant on the commercial scale. The hope is that, by showing that this type of ethanol production is scalable and practical, investors will become interested in providing more financing for the project going forward. After all, the company is likely to run through its \$34 million in venture capital fairly quickly.

The idea of using [microbes](#) to make various chemicals and fuels is not new. Many companies have been working on putting these tiny creatures to work on behalf of mankind. It will be interesting to see whether ZeaChem's process manages to distinguish itself from others, or whether it goes the way of so many other companies using alternative methods to produce ethanol and other chemicals.

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