

Sustainable Biofuel Source

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Widely Grown Agave Plant is Answer to World's Fuel and Energy Needs, Experts Say-

Experts agree that agave, a plant used in the production of tequila, can be a sustainable biofuel source because it would not compete with food crops or threaten water supply. According to research papers published last month in an issue of [Global Change Biology Bioenergy](#), this plant can not only sustain high yields, but can easily withstand extreme temperatures, droughts and CO2 increases.

Roughly 20 percent of the world is semi-arid, and with around 200 species of agave growing around the world, experts say that this plant could be the answer to meet, or even exceed, the world's energy needs. Agave mapisaga and Agave salmiana are two varieties in particular which produce crop yields that surpass productivity from corn, soybean, sorghum, and wheat.

To boot, even without irrigation these varieties still can maintain high yields. Arturo Velez, head of the Agave Project and former coordinator at the National Confederation of Forestry Producers, says that certain Agave species can generate twice the dry biomass per hectare of hybrid poplar, three times the sugar of sugarcane, and four times more cellulose than eucalyptus — plus, capture five times more CO2 than the most productive ecosystem.

“Mexico has 80 million hectares of arid and semiarid areas with no productive potential in which 5,600 million tons of dry biomass could be obtained from agave,” he said. Various species of agave are currently in use throughout Mexico for tequila production, bacanora drinks and henequen fibre. But as of now, up to 80 percent of the plant's [biomass](#) is being discarded.

SOURCE: <http://www.renewable-energy-news.info/agave-sustainable-biofuel-source/>