More about Amyris

Amyris has developed genetic an industrial synthetic biology platform (genetic engineering technologies) that enables modification of the sugar metabolic pathways in microbes, primarily yeast. This technology enables Amyris to design living factories that convert plant-sourced sugars from crops such as sugarcane or sweet sorghum into target molecules.

Products

The first molecule that Amyris is focusing on is Biofene, Amyris-brand farnesene. Farnesene is a hydrocarbon building block that can replace petrochemicals in a wide variety of products in the cosmetics, flavors and fragrances, consumer product, polymers, lubricants and fuel markets. Farnesane is already a source of fuels via its Amyris's partnership with Total.

Amyris is now selling a second renewable ingredient under its Neossance brand. It concerns a Hemisqualane: a pure, plant-derived, light emollient with high spreadability and proven performance characteristics. Squalane is a hydrocarbon, and a terpene. It is the bridge between flavorings, fragrances and high-performance fuels that exists in the world of terpenes.

Partnerships

Each of the steps in the production process – from the feedstock, through fermentation, to recovery and finishing – use processes that are already used by other industries today, enabling cost-effective scaling of production. Amyris is trying to be competitive by an innovative take on established infrastructure. Instead of building new “greenfield” facilities the company offers partners to build new, “bolt-on” facilities adjacent to existing mills. This reduces the capital required to establish and scale production. Simultaneously partners are offered the opportunity to diversify and grow their product lines. In addition, Amyris's partnership model incorporates cultivating long-term relationships with customers and co-developing ingredients with them to meet specific product development goals. Amyris has manufacturing partnerships with Glycotech, Biomin, Sao Martinho, Tate & Lyle and Antibioticos. The company has ongoing research collaborations in Australia, Brazil and the U.S., and is a founding member of the Advanced Biofuel Association (ABFA), Biotechnology Industry Organization (BIO) and Diesel Technology Forum (DTF), among others.

Sources: Biofuels Digest, January 5, 2015; Amyris Press releases.